



## HAMPDEN COUNTY REGISTRY OF DEEDS

### DAMS FILE COLLECTION

#### BOOK D05

## CITY OF CHICOPEE, MASSACHUSETTS



*Donald E. Ashe, Register  
Hampden County Registry of Deeds,  
a Division of the Office of  
William Francis Galvin, Secretary of the Commonwealth*

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1928 Chicopee

Located on small tributary of the Chicopee River.

City/Town	Chicopee
Dam	Ashe Dam
Name	Ashe, Abbie T
Water	Chicopee River



500 Words  
Chickpeas

To the County Commission  
Gentlemen

As soon as I could  
permy I have engaged  
a preferable man to  
make a passage to  
the water to the hand  
As the Pond is no  
to me

Respectfully  
Abner

December 31, 1928

Mrs. Abbie T. Ash,  
Montgomery Street,  
Chicopee Falls, Mass.

Dear Madam:

In accordance with the provisions of Section 45 Chapter 253 of the General Laws as amended by Chapter 33 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your icepond dam, located on a tributary of the Chicopee River, so-called, in the City of Chicopee has been inspected by our engineer and your attention is called to the following recommendations made by him:

"The embankment is in poor condition showing considerable erosion on the downstream slope. It is recommended that repairs be made thereon and a surface spillway added to supplement the present overflow pipe. Should repairs not be made on the structure the pond should be emptied for if the dam should fail with the reservoir full some material damage might be done to the Hampden Bleachery plant downstream".

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_



Mrs. Abbie T. Ash,  
Montgomery St.,  
Chicopee Falls, Mass.

Dear Madam:

In accordance with the provisions of Section 45 Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your icepond dam, located on a tributary of the Chicopee River, so called, in the City of Chicopee has been inspected by our engineer and your attention is called to the following recommendations made by him:

"The embankment is in poor condition showing considerable erosion on the downstream slope. It is recommended that repairs be made thereon and a surface spillway added to supplement the present overflow pipe. Should repairs not be made on the structure the pond should be emptied for if the dam should fail with the reservoir full some material damage might be done to the Hampden Bleachery plant downstream".

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

April 26, 1933

Mrs. Abbie T. Ashe,  
Montgomery Street,  
Chicopee Falls, Mass.

Dear Madam:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"Because of the poor condition of the dam, the pond has been drawn down to a safe level. If it is not intended to maintain the dam any longer, a free passage for the water should be made through the structure, thus relieving the owner of all responsibility. If for any reason it should go into service again, the dam should first be substantially repaired."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairmen.



Ames Sword Company Dam



1933 Chicopee

Located on the Chicopee River.

City/Town	Chicopee
Dam	Ames Sword Company Dam
Name	Ames Sword Company
Water	Chicopee River

April 26, 1933.

Ames Sword Company,  
Grape Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on the Chicopee River in the City of Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"There is some leakage through the dam at a point about one hundred and sixty feet from the south bulkhead which should be stopped.

Some masonry work is required along the crest, and there is a rut in the ledge along the base of the dam which should be filled."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_

\_\_\_\_\_



Chicopee River Dam aka Western Massachusetts Electric Company Dam fka Chicopee Manufacturing Company Dam



1948 Chicopee

Dam located on the Chicopee River at Chicopee Falls. See also: County Highways - "Chicopee Manufacturing Company Storage Reservoir Dam" - cho9029 & "Dam across Chicopee River at Bircham Bend Power Company...", cho2116.

City/Town	Chicopee Falls
City/Town	Chicopee
Dam	Chicopee River Dam
Dam	Chicopee Manfaucturing Company Dam
Dam	Western Massachusetts Electric Company Dam
Name	Chicopee Manfaucturing Company
Name	Western Massachusetts Electric Company
Water	Chicopee River

November 10, 1948

Edward Bourbeau, Mayor  
City of Chicopee  
City Hall  
Chicopee, Massachusetts

Dear Mr. Mayor:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that the dam belonging to the City of Chicopee and located on the Chicopee River at Chicopee Falls has been inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"In a recent inspection made of the Chicopee Manufacturing Company Dam No. 2, located on the Chicopee River at Chicopee Falls and now owned by the City of Chicopee, it was found that the concrete in the concrete gravity portion of the dam and the concrete drainage head gate structure is badly scoured, spalled and disintegrated and in need of repair.

At places the section of the concrete gravity portion of the dam has been reduced three to four feet in thickness and its stability correspondingly reduced.

The scour and disintegration at the drainage head gate structure has exposed the outer reinforcing steel and reduced the stability of this structure.

The rate of scour and disintegration can be expected to accelerate in the future resulting in failure of the dam.

This dam should be breached or repairs of a permanent nature made in 1949. If permanent repairs are undertaken, plans should be filed for approval."

December 18, 1951

City of Chicopee  
City Hall  
Chicopee, Mass.

Attention: City Engineer

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on the Chicopee River in Chicopee Falls has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Repairs to the southerly abutment and the foundation of the drawoff gate structure are necessary. These repairs should be started and completed during the early part of 1952."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Chicopee Falls Dam*

December 18, 1951

City of Chicopee  
City Hall  
Chicopee, Mass.

Attention: City Engineer

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on the Chicopee River in Chicopee Falls has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Repairs to the southerly abutment and the foundation of the drawoff gate structure are necessary. These repairs should be started and completed during the early part of 1952."

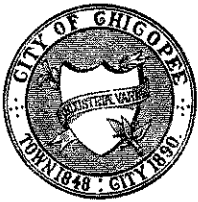
Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Chicopee Falls Dam*



# City of Chicopee, Massachusetts

Executive Department

WALTER J. TRYBULSKI  
MAYOR

February 29, 1952

William F. Stapleton, Chairman  
County Commissioners,  
Court House, Elm Street,  
Springfield, Massachusetts

Dear Sir:

In reply to your letter of February 20, 1952 concerning the Chicopee Falls Dam, the City Engineer informs me that he has had a meeting with Mr. George McDonald, your County Engineer on dams, and that they have agreed on a practical method of repairs to this dam.

I am instructing the City Engineer to call for bids so as to find out how much these repairs will cost. When this is done, I will be in a better position to tell your Commission as to what steps we can take in this matter.

Very truly yours,

Walter J. Trybulski

Mayor

WJT:tg





# City of Chicopee, Massachusetts

Executive Department

WALTER J. TRYBULSKI  
MAYOR

February 29, 1952

William F. Stapleton, Chairman  
County Commissioners,  
Court House, Elm Street,  
Springfield, Massachusetts

Dear Sir:

In reply to your letter of February 20, 1952 concerning the Chicopee Falls Dam, the City Engineer informs me that he has had a meeting with Mr. George McDonald, your County Engineer on dams, and that they have agreed on a practical method of repairs to this dam.

I am instructing the City Engineer to call for bids so as to find out how much these repairs will cost. When this is done, I will be in a better position to tell your Commission as to what steps we can take in this matter.

Very truly yours,

Walter J. Trybulski

M a y o r

WJT:tg

TIGHE & BOND

189 High Street,  
Holyoke, Mass.

C O P Y

Dec. 31, 1952

The Hon. Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:-

The work of repairing the Dam of the City of Chicopee on the Chicopee River at Chicopee Falls has been completed. The job was inspected from time to time during construction and at all times an excellent quality of workmanship was observed. The final inspection has been made and the repairs at this dam have been completed in accordance with plans and specifications on file at your office. Therefore the reconstruction work on this dam is recommended to your Honorable Board for acceptance.

Respectfully submitted,

George H. McDonnell,  
County Hydraulic Engineer

C O P Y

April 4, 1952

Thomas M. Robinson, City Engineer  
City Hall  
Chicopee, Mass.

Dear Sir:

Would you kindly submit to the undersigned, a proposed schedule for the work to be done in repairing the Chicopee River Dam at Chicopee Falls. This schedule should be drawn up based upon the estimated dates when plans and specifications will be completed, when the project will be let out for bid, when construction work will start and the time allowed for the Contractor to complete the work.

If I can be of any assistance to you, please do not hesitate to phone or write. I will be glad to come to Chicopee at any time to discuss the project and the plans and specifications with you.

Very truly yours,

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George H. McDonnell  
County Hydraulic Engineer

C O P Y

April 4, 1952

Thomas M. Robinson, City Engineer  
City Hall  
Chicopee, Mass.

Dear Sir:

Would you kindly submit to the undersigned, a proposed schedule for the work to be done in repairing the Chicopee River Dam at Chicopee Falls. This schedule should be drawn up based upon the estimated dates when plans and specifications will be completed, when the project will be let out for bid, when construction work will start and the time allowed for the Contractor to complete the work.

If I can be of any assistance to you, please do not hesitate to phone or write. I will be glad to come to Chicopee at any time to discuss the project and the plans and specifications with you.

Very truly yours,

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George H. McDonnell  
County Hydraulic Engineer

*Spfld Union*  
*Feb. 20, 1952*

# COUNTY BOARD ORDERS REPAIR OF FALLS DAM

## Cost Estimated at \$20,000 Have Made Same Appeal Several Times

Chicopee, Feb. 19.—The Hampden County Commission has once more made an urgent appeal that the stone dam above the Deady Memorial Bridge in Chicopee Falls be repaired, it was learned today.

Commission engineers have surveyed the dam structure and found stone work near the now unused gate house to be deteriorated. As a safety measure, the commission believed that necessary repairs should be completed this year.

The estimated cost of the repair project was set at \$20,000. The erection of a temporary dam above the area in need of repair would be required, bringing the cost to the \$20,000 figure.

No provisions for the repair of the dam were made in the 1952 budget by Mayor Trybulski. He pointed out that the commission could have the repairs made and later bill the city.

The mayor will confer with chairman of the commission, William Stapleton on what can be done. Each year for the past several, Chicopee has been ordered to repair the structure but nothing was done by the administration in power.



February 20, 1952

Hon. Walter J. Trybulski, Mayor,  
City of Chicopee,  
Mass.

Dear Mayor Trybulski:

We wish to call to your attention our letter of December 18, 1951 pertaining to the condition of the dam on the Chicopee River in Chicopee Falls owned by the City of Chicopee.

Our Engineer, George H. McDonnell, recommended that these repairs should be started and completed during the early part of 1952.

Please advise us of action to be taken by the City of Chicopee in compliance with our letter of December 18, 1951.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

WFS/N

Nov. 30, 1960

City of Chicopee  
City Engineer  
City Hall  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on Chicopee River, just upstream from the Chicopee Falls Bridge has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"Cracks in the mass masonry at the left abutment area on the gate operating structure are minor in nature and, at the present time are of no concern in connection with the safety of the dam. The spillway structure itself, across the river, is satisfactory.

At the right abutment adjacent to the Bay State Refining Company plant, the stone masonry blocks have opened joints at some locations and vegetation is growing from other joints. There is evidence of stone block movement as the result of this condition. Continuation of the growth of vegetation plus weathering action in open joints due to thawing and freezing in the winter time can cause further movement of the masonry blocks. It would seem advisable to kill the vegetation and repair the open joints during the coming year."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

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Nov. 1, 1961

↓ *Chic*  
Western Mass. Electric Co.,  
General Office  
West Springfield, Mass.

Att: Engineering and Hydraulic Maintenance Depts.

Gentlemen:

In accordance with Chapter 253, Section 45, et. seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on the Chicopee River between Ludlow and Indian Orchard, just upstream from the West Street Bridge over the Chicopee River, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The masonry at this dam was found to be in satisfactory condition. Normal flashboards and the usual timber platform were noted on the crest of the structure at the time of the last inspection. In general, the left abutment area was found to be in satisfactory condition. The canal spillway and related masonry was found OK, except on the face of the spillway wall just downstream of the main dam. A portion of the face of the stone work has been weathered away and it would appear as if the failure has now occurred to a depth of about 1 ft. at the top section as viewed from the bed of the river at the affected area. If this condition becomes worse, it would be advisable to do maintenance work on the stone masonry.

At the right abutment the masonry and the earth fill were found

-2-  
Nov. 1, 1961

to be in satisfactory condition. No problem now occurs with surface runoff wash in the area."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

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*Chapman*

December 11, 1963

Western Mass. Electric Co.,  
Main Office  
West Springfield, Mass.

Att: Dam & Hydraulic Maintenance Sections

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located on Chicopee River at Indian Orchard, just upstream from the West Street bridge across Chicopee River connecting Ludlow with Indian Orchard has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The dam itself, extending across the Chicopee River, was found to be in good condition and the usual flashboards were in place on the crest. The face of the stone masonry on the dry side and along the canal wall just downstream from the abutment, needs attention. Many of the stones have spalled and sections have broken off. Many of the existing stones appear quite soft and rotten at the broken areas. In the opinion of the undersigned, the stone work that is unsatisfactory should be cut out and removed and then voids filled with a good dense concrete masonry. It is not essential that repairs to the stone masonry be made immediately, however, it would be advisable for the Owner to plan repairs within the next year or so at the latest. Failure to make repairs in the near future could result in the need for more expensive and more extensive repairs at a later date.

An examination of the right abutment area indicates that this section of the structure is in good condition."

As reported by the County Hydraulic Engineer, the work of repairing the stone work is not an absolute necessity at the present time. However,



to prevent extension of the damage and the possibility of more expensive repairs at a later date, it would seem advisable to plan repairs to the masonry during the Summer of 1964.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

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*Chicopee*

November 25, 1964

Western Mass. Electric Company  
Main Office  
West Springfield, Massachusetts

Att: Dam & Hydraulic Maintenance Sections

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located on Chicopee River at Indian Orchard, just upstream from the West Street bridge across Chicopee River connecting Ludlow with Indian Orchard has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"This dam, located in the Chicopee River and upstream from the West Street Bridge connecting Ludlow with Indian Orchard was found in satisfactory condition. However, maintenance work is needed at the left abutment wall adjacent to the canal headworks. The face of the wall towards the river bed and immediately downstream from the left corner of the dam proper is in need of repair work. The stone masonry is spalling and breaking up. A shallow but fairly large cavity is being formed and this cavity is becoming larger with each passing year. All rotten and loose stone work should be removed and the stone masonry wall properly repaired.

It was also noted that vegetation is growing from the face of the canal wall, from the abutment wall and on the downstream face of the dam itself. This vegetation should be killed and removed. Stone masonry joints needing repair should be pointed.

The spillway crest planking, timbers and flashboards were satisfactory. The crest of the canal spillway was okay. On the day of inspection, water level in storage was down about 6" from the top of the flashboards.

At the right abutment, the concrete wall and the basic masonry of the abutment structure were found to be in good condition."

The need for repair work at the stone masonry wall has been pointed out previously. In our communication of December 11, 1963, we stated that the work of repairing the stone work was not an absolute necessity at that time but that to prevent extension of the damage and the possibility of the need for more expensive repairs at a later date, it would seem advisable to make repairs to the wall in 1964.

From the report of the County Hydraulic Engineer the condition at the wall has grown worse and repairs should definitely be planned for the 1965 construction season. To prevent damage to masonry joints, the advice regarding the removal of vegetation should be followed.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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Chicopee City Water Department Dam - Lower



1928 Chicopee

Also see: Dam Report Section - Chicopee.

City/Town	Chicopee
Dam	Chicopee City Water Department Dam - Lower

CHICOPEE  
D05004

CHICOPEE CITY WATER DEPARTMENT DAM - LOWER

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)



Chicopee City Water Department Dam - Middle



1928 Chicopee

Also see: Dam Report Section - Chicopee.

City/Town	Chicopee
Dam	Chicopee City Water Department Dam - Middle

December 16, 1953

City of Chicopee Water Department  
27 Tremont Street  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dams at Cooley Brook have been recently inspected by our Engineer, and your attention is called to the following conditions noted at the Middle Dam and recommendations made by him:

"The spillway is dangerously blocked with planks and debris. At time of high stream flow, this condition could result in a raising of the pond level and possible wash around the spillway with the resulting loss or damage to the dam. An occasional inspection of this dam and the removal of debris as it collects would prevent the existing condition from building up to a dangerous level."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Chicopee City Municipal Water Works Storage Dam No 1



1928 Chicopee

Located across Cooley Brook, also known as Crowfoot Brook, in Willimansett.

City/Town	Willimansett
City/Town	Chicopee
Dam	Chicopee City Municipal Water Works Storage Dam No 1
Water	Cooley Brook
Water	Crowfoot Brook

Page 17 of report

City of Chicopee Water Works,  
Chicopee, Mass.

you are notified that your <sup>reservoir</sup>  
dam on Cranford Brook so called in that part of the  
City of Chicopee known as Willimansett, etc.

"A small surface overflow or  
swale should be built at one end  
of the dam in order to increase the  
factor of safety against flood water  
topping the structure."

April 28, 1926

City of Chicopee Water Works,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your reservoir dam on Crowfoot Brook so-called in that part of the City of Chicopee known as Willimansett, has been inspected by our engineer and your attention is called to the following recommendations made by him:

"A small surface overflow or swale should be built at one end of the dam in order to increase the factor of safety against flood water topping the structure."

Yours very truly,

COUNTY COMMISSIONERS

\_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# JAMES L. TIGHE

MEMBER  
AM. SOC. C. E.  
INST. C. E. GREAT BRITAIN  
ENG. INST. OF CANADA

CONSULTING ENGINEER  
CALEDONIAN BUILDING, 189 HIGH STREET  
HOLYOKE, MASS.  
TELEPHONE 790

MEMBER  
BOSTON SOC. C. E.  
ENG. SOC. WEST. MASS.  
AM. & N. E. W. W. ASSOC'S

MEMBER AM. INST. OF CONSULTING ENGINEERS, INC.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
ANALYSIS OF WATER

December 21, 1928.

WATER POWER INVESTIGATIONS  
AND DEVELOPMENT  
DAMS AND POWER INSTALLATIONS  
ESTIMATES AND APPRAISALS

The Hon. the Board of County Commissioners  
of Hampden County,  
Springfield, Mass.  
George S. Cook, Chairman.

Dear Sir:

I recommend for your acceptance the two earthen dams built in the city of Chicopee and which are now in service, namely, the Holyoke Ice Co. dam across the Willimansett brook of which the plans and specifications were approved in 1923 and the City of Chicopee Municipal Water Works storage dam across the Cooley brook of which the plans and specifications were approved in 1926.

Respectfully submitted,

*James L. Tighe*

December 10, 1952

City of Chicopee Water Department  
27 Tremont Street  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq., of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dams at Cooley Brook have been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"The spillway of the small dam just below the main dam and located under the roadway bridge should be cleaned of all debris and the greatest opening allowable should be provided between the bottom of the roadway bridge and the crest of the dam spillway."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_

*City of Chicopee Water Works Dam*

Chicopee City Parks Department Dam fka Bemis Pond Dam - Lower



1935 Chicopee

Two dams located at Szot Park on Dingle Brook and Bemis Pond. See also: County Highways (Chicopee) - "Bemis Pond Reinforcing Dam & New Spillway" - ch10090. See also: County Roads Plan #18 (1954) "Dam & Bathing Area - Szot Park" and Plan #22 (1957) "Bemis Pond Dam Reconstruction".

Abutters Szot Park

City/Town	Chicopee
Dam	Chicopee City Parks Department Dam
Dam	Bemis Pond Dam
Water	Bemis Pond
Water	Dingle Brook



Robert E. Edward Bemis,  
760 Trent St.,  
Chicopee, Mass.

you are notified that your  
ice pond dam located on Eagle Brook so called  
in the City of Chicopee, etc.

"There is some seepage along the toe  
of the dam especially towards its west end.

After several attempts failed to  
stop this seepage by dumping gravel  
on the upstream face of the structure, the  
owner concluded that the seepage was not  
from the pond, but a spring from the high  
natural bank against which the west  
end of the dam abuts.

In view of the large pondage behind the dam  
and the damage that might result from failure  
of the structure, it is recommended that, after the  
ice is harvested, that this seepage be more thoroughly  
investigated and traced to its source, as the the pond can  
be drawn down in all probability without much, if any,  
inconvenience to the owner." Now, therefore, etc.

December 31, 1926

Messrs. Robert & Edward Bonis,  
760 Front Street,  
Chicopee, Mass.

Gentlemen:

Inasmuch as your dam was inspected quite recently by our engineer and found not to be in good condition toward its west end because of seepage and erosion of the embankment, your attention is called to the notice sent you on Feb. 3d 1926 a copy of which is herewith enclosed.

Yours very truly,

COUNTY COMMISSIONERS

By George S. Cook  
Chairman.

John Hall

John G. Maxfield

N.

# JAMES L. TIGHE

MEMBER  
AM. SOC. C. E.  
INST. C. E. GREAT BRITAIN  
ENG. INST. OF CANADA

CONSULTING ENGINEER  
CALEDONIAN BUILDING, 189 HIGH STREET  
HOLYOKE, MASS.  
TELEPHONE 790

MEMBER  
BOSTON SOC. C. E.  
ENG. SOC. WEST. MASS.  
AM. & N. E. W. W. ASSOC'S

MEMBER AM. INST. OF CONSULTING ENGINEERS, INC.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
ANALYSIS OF WATER

WATER POWER INVESTIGATIONS  
AND DEVELOPMENT  
DAMS AND POWER INSTALLATIONS  
ESTIMATES AND APPRAISALS

December 30, 1930

The Hon. the County Commissioners,  
Hampden County,  
Court House, Springfield, Mass.

John G. Maxfield, Chairman:

Dear Sir:

The seepage through the ice pond earthen dam across Dingle Brook in Chicopee, about which the owners were notified some time ago, has not been stopped and appears to be increasing.

It is recommended, therefore, in view of the large pondage formed by the dam and the damage which might result from its failure, that the pond be drawn down until the structure is repaired.

Respectfully submitted,

*James L. Tighe*

December 31, 1930

Robert and Edward Bemis,  
760 Front Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your ice pond dam, located on Dingle brook, so called, in the city of Chicopee has been inspected by our engineer and your attention is called to the following recommendation made by him:

"The seepage through the ice pond earthen dam across Dingle brook in Chicopee, about which the owners were notified some time ago, has not been stopped and appears to be increasing.

It is recommended, therefore, in view of the large pondage formed by the dam and the damage which might result from its failure, that the pond be drawn down until the structure is repaired."

Now therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

---

Chairman

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April 12, 1933

Messrs. Robert & Edward Bemis,  
760 Front Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 173 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on Dingle Brook in the City of Chicopee, has been recently inspected by our engineer and found to be in an unsafe condition. Considering the risk involved to life and property in case of failure of the structure, it is advisable that the pond formed by the dam be drawn down to at least the level of the roadway in Front Street just below the dam, that is, to a level of at least seventeen (17) feet below the top of the dam.

Now, therefore, in accordance with Section 46 of said Chapter 253, you are ordered to draw down the water in the pond to a level of not less than seventeen (17) feet below the top of the dam and to maintain the water at the said level or lower until the dam is made safe and permission of the County to refill the pond is granted.

Your attention is also called to Section 47 and 48 of Chapter 253 of the General Laws, as amended, a copy of which is attached.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_

\_\_\_\_\_

# JAMES L. TIGHE

CONSULTING ENGINEER

CALEDONIAN BUILDING, 189 HIGH STREET

HOLYOKE, MASS.

TELEPHONE 790

MEMBER AM. INST. OF CONSULTING ENGINEERS, INC.

MEMBER

AM. SOC. C. E.

INST. C. E. GREAT BRITAIN

ENG. INST. OF CANADA

MEMBER

BOSTON SOC. C. E.

ENG. SOC. WEST. MASS.

AM. & N. E. W. W. ASSOC'S

WATER SUPPLY

SEWERAGE

SEWAGE DISPOSAL

ANALYSIS OF WATER

WATER POWER INVESTIGATIONS

AND DEVELOPMENT

DAMS AND POWER INSTALLATIONS

ESTIMATES AND APPRAISALS

April 12, 1933.

The Hon. The Board of County Commissioners,  
Hampden County,  
Springfield, Massachusetts,

Gentlemen:

A recent inspection of the Bemis ice pond earthen dam, on Dingle Brook in the City of Chicopee, shows that it is not in a safe condition.

The overflow which is a brick well connected with a 28 X 30 inch brick culvert laid through the dam, is obstructed, and the downstream slope of the embankment for a distance of about forty feet towards its east end has slipped somewhat.

Considering the large size of the pond and the damage which might result from failure of the dam, it is recommended that the water level in the pond be drawn down to at least the level of the roadway on Front Street, which is located only a short distance downstream, that is, to a level of not less than seventeen (17) feet below the top of the dam.

When the pond has been drawn down, it should not be re-filled until provision has been made for adequate and reliable overflow discharging capacity and the dam overhauled and strengthened generally.

Respectfully,

*James L. Tighe*

## CHAPTER 253

### Section 47.

If, after notice in writing to the owner of a reservoir or dam which has been so examined and adjudged to be unsafe, the said owner refuses or neglects to make such alterations or repairs as the commissioners order, they may, at the expense of the county, cause such reservoir or dam to be altered and repaired or any part thereof removed or the water drawn off, whichever they may consider necessary for the safety of life, property, roads or bridges shall be erected except in compliance with the three preceding sections, and after the water has been drawn off, the reservoir shall not be filled again until the orders of the commissioners have been complied with.

### Section 48.

The Commissioners shall make such orders as they may deem just as to the payment by the owner, county or other party of the costs and expenses incurred by them under the three preceding sections, and if the reservoir or dam was adjudged to be unsafe, said costs and expenses may be ordered paid by the owner, with interest, from the time they were paid by the county. Notice shall be given the County Treasurer and the owner or other party of the amount due the county.

393 Atlantic Ave  
Westerly, R.I.  
April 22-1933.

County Commissioners,  
Springfield, Mass.

Attention Mr. Bray:

The notice from the County Commission regarding lowering level of pond has been forwarded to me by my brother Edward Beris.

In March 1931, the pond was lowered to the 1906 level and to accomplish this, all the new stone work, which had been laid, was broken out; it was my intention to have the pond remain at the original <sup>level</sup> as we should probably cut no more ice there. In May of the same year, I found that boys had thrown some of the granite blocks back and these I removed.

In spring of 1932 I was in Chicopee, and then removed some planks that boys had put in, trying to raise the pond. Last Oct (1932) I was staying in Springfield for few days and went up to see how things were and found every thing all right. One month ago I wrote my brother that if the pond was higher than it should be, he would probably find the boys had <sup>put</sup> something down again. Since then I have learned that a woman who lives on the west side of the pond, saw some men or boys dropping what she thought might be logs of sand.

The boys want the pond high enough to give them a swimming place at the upper end and since I am living in Rhode Island, it is pretty hard to keep watch of them. Another cause of higher water is that the City of Chicopee has discontinued the use of the Abbot reservoir and that throws an extra 10 in stream of water into the pond.

I will come to Chicopee in a few days and do all I can to get the pond back to the level I intend it to remain at.

That dam was built in 1902 and the construction is much stronger than that of dams built more recently; I do not anticipate any trouble from it, but, as I have said, will be there shortly and endeavor to get the water where it meets with your approval.

Very truly yours

Robert E. Beris

4/26/33

Mr. Tighe stated they will start  
drawing down the water tomorrow, 4/26:



HAMPDEN COUNTY  
MASSACHUSETTS.

CONTRACT FOR THE LOWERING OF THE  
SPILLWAY OF THE BENNIS FOND DAM IN  
CHICOPPEE, MASS.  
NOVEMBER 1935.

HAMPDEN COUNTY  
MASSACHUSETTS.

CONTRACT FOR THE LOWERING OF THE  
SPILLWAY OF THE BEMIS POND DAM IN  
CHICOPEN, MASS.

\*\*\*\*\*

The County of Hampden, Massachusetts by its Board of County Commissioners party of the first part and

herein after designated the contractor  
party of the second part agree as follows:

Article 1. The contractor shall do all the work and furnish all the labor and tools necessary for the lowering of the spillway of the Bemis pond dam and for the removal of the stone and earth fill in front of the spillway.

Article 2. Wherever the word Board is used in this contract it shall mean the Board of County Commissioners of Hampden County, Massachusetts.

Wherever the word Engineer is used it shall mean in this contract the person holding the position or acting in the capacity of engineer of the Board.

Article 3. All the work under this contract shall be done to the satisfaction of the engineer who shall in all cases determine the quality and acceptability of the work which is to be paid for hereunder and his determination and decision in case any question shall arise shall be a condition precedent to the right of the contractor to receive any money under this contract.

SPECIFICATIONS

Article 4.

Section 1. The work to be done is the lowering of the Bemis pond spillway three and one-half feet and the stone and earth fill in front of the spillway to the same depth. In removing the earth-fill in front of the spillway a channel of sufficient width shall be excavated to give a free water way to the crest of the lowered spillway. The sides of the channel shall have flat slopes and rounded off so that the earth-fill will not afterwards wash into and obstruct the channel. The crest of the spillway after being lowered shall be levelled up with brick or stone laid in cement as directed by the engineer. In lowering the spillway the work

shall be done by hand and no explosives shall be used. The materials removed or any part thereof shall not be dropped or thrown into the well of the spillway but deposited on the surface of the earth-fill adjacent to the channel as directed by the engineer.

The work may be done intermittently or, in piece-meal fashion, so to speak, in order that the pond may be allowed to lower or drop as the work progresses.

No matter what method is followed however, in the lowering of the spillway the whole work shall be completed on or before Jan. 15th, 1936.

After the work is completed the spillway-well shall be cleaned of all debris that may be accumulated therein, and the piping, now set in front of the present spillway, shall be set in front of the lowered spillway, as directed by the engineer.

Section 2. All lines, elevations and grades shall be given by the engineer but the contractor shall provide such stakes and batter boards as may be required.

Article 5. The contractor shall employ only competent men to do the work and shall in all operations connected with the work inform himself of all existing State Laws. His attention is called to Chapter 149 of the General Laws and Amendments thereto.

Article 6. The contractor shall take all responsibility of the work and take all precautions for preventing injuries to persons or property in or about the work. Shall bear all losses resulting to him on account of the character of the work or on account of the work being different to what he estimated or expected, and shall assume the defence of and indemnify and save harmless the Board, its officers and agents, from all claims relating to injuries to any person received or sustained by or from the contractor or his employees in doing the work or to any act, omission or neglect of the contractor or his employees therein.

Article 7. The County of Hampden shall pay and the contractor shall receive as full compensation for everything furnished and done under this contract and for all risks of every description connected with the work and for well and faithfully completing the work as herein provided, the sum of

§

Article 8. The engineer shall as soon as practicable after the completion of the contract notify in writing the Board that the work is completed in accordance with the plans and specifications and the

Board shall within thirty-five days after such notification from the engineer, pay the entire sum due under the contract.

Article 9. Neither the Board nor any member or agent thereof shall be liable for, or be held to pay, any money to the contractor except as provided in this contract and on making payment as aforesaid they shall be released from all claims or liability to the contractor for anything relating to the work or for any act or neglect of the Board or of any person relating to or affecting the work.

IN WITNESS whereof the parties have hereunto set their hands  
the \_\_\_\_\_ day of \_\_\_\_\_ in the year 1938.

BOARD OF COUNTY COMMISSIONERS  
HAMPDEN COUNTY  
MASSACHUSETTS.

CONTRACTOR  
BUSINESS ADDRESS

PROPOSAL TO THE BOARD OF  
COUNTY COMMISSIONERS OF HAMPDEN COUNTY,  
MASSACHUSETTS FOR THE LOWERING OF THE  
SPILLWAY OF THE BEMIS POND DAM IN  
CHICOPEE, MASS.

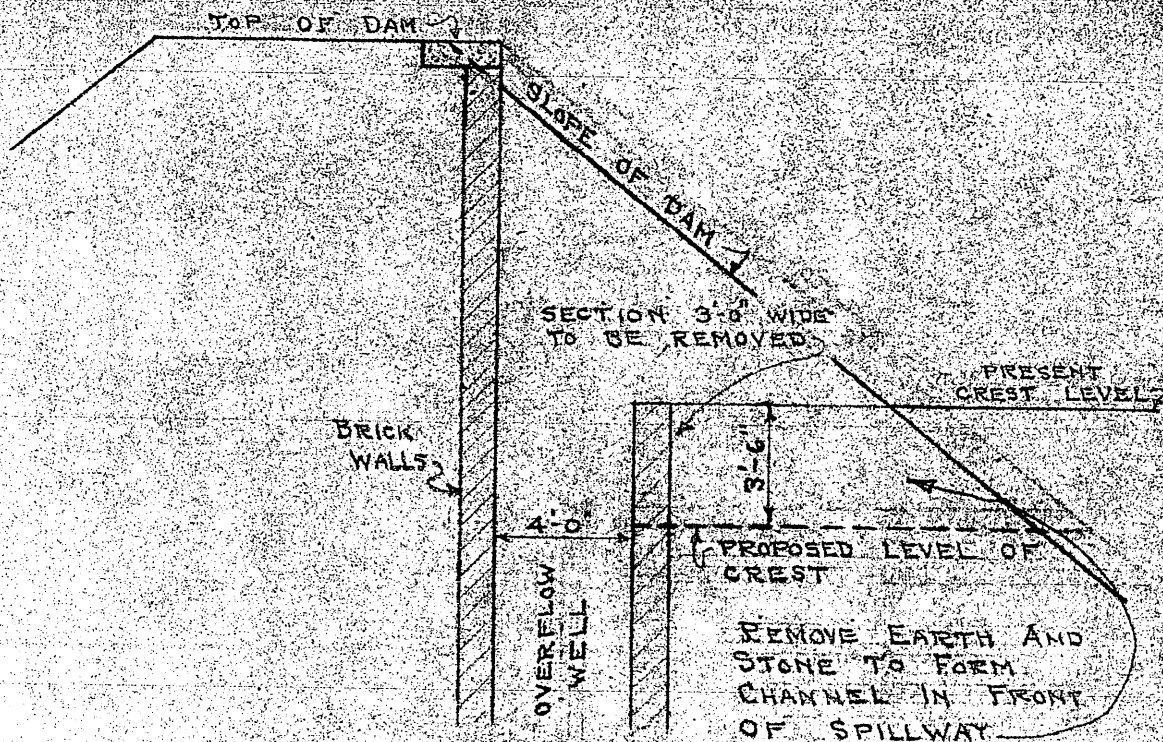
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The undersigned declares that he has examined on the ground the work to be done and the plans and specifications thereof and has taken into consideration all the difficulties to be met with in the doing of the work and he proposes and agrees that he will contract with the Board of County Commissioners of Hampden County, Mass. to provide all the labor and tools to do all the work specified in the plans and specifications in the manner and time therein prescribed and in accordance with the requirements of the engineer as therein set forth and that he will take in full payment therefor the following lump sum, to wit:

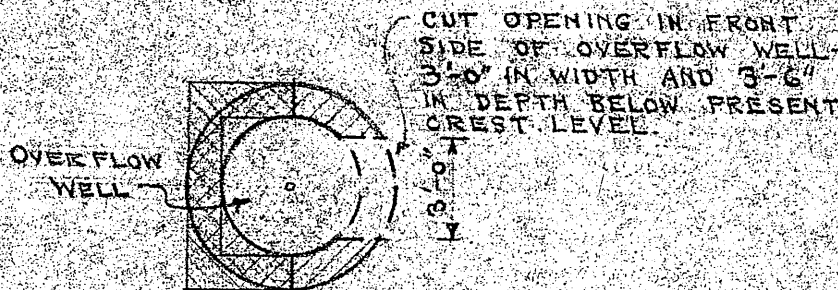
Dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year 1935.

SIGNATURE OF BIDDER

AND BUSINESS ADDRESS



SECTION



PLAN

# PROPOSED LOWERING OF SPILLWAY OF THE

BEMIS POND DAM

CHICOPEE, MASS.

FOR THE

HAMPDEN COUNTY COMMISSIONERS

Nov. 1935

Scale 1" = 5'

February 5, 1926

Robert and Edward Bemis,  
760 Front St.,  
Chicopee, Mass.

Dear Sirs:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your ice pond dam, located on Dingle Brook so-called in the City of Chicopee has been inspected by our engineer and your attention is called to the following recommendations made by him:

"There is some seepage along the toe of the dam especially towards its west end. After several attempts failed to stop this seepage by dumping gravel on the upstream face of the structure, the owner concluded that the seepage was not from the pond, but a spring from the high natural bank against which the west end of the dam abuts.

In view of the large pondage behind the dam and the damage that might result from failure of the structure, it is recommended that, after the ice is harvested, that this seepage be more thoroughly investigated and traced to its source, as then the pond can be drawn down in all probability without much, if any, inconvenience to the owner."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

\_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

September 2, 1942

City of Chicopee, Park Department  
City Hall  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on Dingle Brook (old Bemis dam) in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him:

"At two places along the top of this dam, the earth fill on the upstream slope has been eroded or worn away, leaving trenches or holes. These trenches should be filled with earth to the level of the surface of the dam."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_



October 18, 1950

Park Commissioners  
City of Chicopee  
City Hall  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on Bemis Pond has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"Gullies have been washed and worn on both faces and top of the earth section of the dam, and these should be filled and properly graded. Fill should be placed to bring the top of the dam to its proper elevation on either side of the spillway. The upstream concrete spillway wing wall needs repairing. Steel reinforcing is exposed."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Bemis Pond Dam  
Chicopee*

December 10, 1952

City of Chicopee Park Department  
City Hall  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located at Bemis Park has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Paths and gullies worn in the top of the earth fill of the dam by people and storm water runoff should be repaired during 1953."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Bemis Park Dam*

November 17, 1954

Department of Parks & Playgrounds  
City of Chicopee  
City Hall  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your new dam under construction at Bemis Pond has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Settlement of earth fill has occurred adjacent to the faces of the side spillways that were recently constructed. Also, adjacent to the main or center spillway, there is indication of earth fill settlement. The settlement of the fill shows that the earth in these portions of the dam was not properly placed and compacted. Settled earth should be dug out sufficiently deep and until properly compacted fill has been exposed. Excavations thus made should be refilled with moisture controlled material and should be rammed and tamped in thin layers. It is recommended that when the sunken areas have been excavated an inspection prior to replacing of the earth fill be requested by the Park Department."

In regard to the recommendation of our Engineer, kindly contact Mr. George H. McDonnell, County Hydraulic Engineer, at Holyoke 3-3991, so that an inspection may be made of the excavated areas prior to refilling these areas with properly compacted material.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_

January 18, 1955

Park Commissioners  
City of Chicopee  
City Hall  
Chicopee, Mass.

Dear Sir:

Our Engineer has made an inspection of your new dam constructed in Bemis Pond at Szot Park. It has been requested that action be taken by this Board to allow the refilling of Bemis Pond with water so that skating may be available to the public.

Based on the recommendations of our Engineer and consideration of your request by this Board, permission is granted for the refilling of Bemis Pond.

Since the new dam is of the type that will be under water both on the upstream and the downstream side, and consequently presents a different condition than ordinarily exists at most dams, your attention is called to the fact that in draining Bemis Pond in the future, for maintenance purposes, you should instruct your personnel to drain the pond slowly in order that water level in the pond will drop at about the same rate as the water level within the voids of the dam drops. Draining this type of a dam slowly is normal operating procedure and we call your attention to the Report from our Engineer, the following being extracted therefrom:

"Since the new dam is the type of structure that will be flooded both on the upstream side and the downstream side under normal service conditions, and since the material used in the construction of the dam was the local clay and sand blanketed with a coarser material, it will be necessary that whenever Bemis Pond is drained that the draining be done slowly. Draining of the pond at a fast rate could result in the water level of the pond lowering at a faster rate than the water level within the pores of the fine grains that make up the dam structure. This could result in sloughing of certain sections of the dam face and could be a maintenance problem. Provided that Bemis Pond is lowered slowly whenever draining is being done, this condition will be controlled and the surface of the dam will remain stable. This condition is not one to be considered dangerous nor detrimental

Park Commissioner  
Chicopee, Mass.

-2-

January 18, 19

to the structure, but is simply a condition that must be realized and appreciated by the maintenance personnel and they should be aware of the proper method of draining Bemis Pond. This practice of lowering water level slowly is standard procedure on the type of dam recently built in Bemis Pond."

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_

April 20, 1955

The Parks & Playgrounds Commission  
City Hall  
Chicopee, Mass.

Gentlemen:

Our Engineer recently inspected your new dam at Bemis Pond in Szot Park and noted that on the downstream face at the left emergency spillway, just to the right of the concrete construction, the sod has slid and a minor slough has taken place. From our Engineer's report it would appear as if the slough is the result of insufficient compaction of the fill around and close to the concrete wall of the left spillway construction. The recommendation for correcting the condition as noted at the time of inspection is as follows:

"The existing condition should be repaired as soon as possible and the repairs can be done by lowering the pond a few feet in order to dry out the portion of the dam where the slough has occurred. After the soil has dried sufficiently, loose material should be dug out and a proper mixture of clay and sand should be rammed and tamped into the cavity formed by the excavation of the soft material in the slough area. After the cavity has been packed with solid and well tamped material, placed in thin layers so as to guarantee good compaction, the top should be covered with a layer of gravel and then the sod replaced to the original grade. It may be necessary to stake the sod to keep it from slipping until the roots have a chance to grow into the soil, and for the sod sections to interlock."

Your attention is called to the fact that when you draw down the level of the pond for the purpose of making the repair to the slough area, the draw-down rate should be very slow to allow time for the voids in the soil of the dam to become empty of their water content. As has been pointed out previously, you have a type of dam whereby water exists on both sides of the dam and since the dam is constructed of fine grained soil, it is necessary that whenever the pond is drained, the draining take place very slowly in order to allow the water within the dam structure itself to drain out so that the level of the water within the dam will never be very much higher than the water level in the pond.

The Parks & Playgrounds Commission  
Chicopee, Mass.

-2-

April 20, 1955.

This is customary practice with your type of structure but it is essential that you be fully acquainted with this condition so that damage to your dam will not occur because of a rapidly receding pond and a remaining high water level within the dam itself.

Very truly yours,

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Chairman

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City of Chicopee  
Park Commissioners  
Parks & Playgrounds Department  
City Hall  
Chicopee, Mass.

August 26, 1955

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located at SZOF PARK on BEMIS POND just upstream from Front Street in Chicopee, that is, the original dam at Bemis Pond, has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"This dam was damaged during the flood of August 18th and 19th. Water cascading down the spillway chute jumped the limits of the chute and caused damage to the face of the dam. This damage was prevented from spreading by the use of sand bags. An examination of the dam shows that along the top of the dam near the edge of the top of the front slope of the dam cracks have appeared in the earth. These cracks in places appear to be the result of movement of the sod and loam layer. However, in some sections the cracks appear far enough back from the top of the slope to be of a more serious nature.

"It is recommended that you direct the owners of this dam to draw down the pond behind the dam and to keep this pond drawn down until such time as the spillway chute is altered to correct the condition that caused the water to jump from the chute and damage the face of the dam, until the damaged face has been repaired and the extent of the cracks on the surface of the earth investigated. In view of the run-off experienced in the recent flood, it would be advisable to review the earth embankment of this dam, based upon a run-off condition comparable with the type of storm recently experienced, and then to make additions and alterations to the entire dam structure as necessary, in order to guarantee that the structure will safely stand against a run-off that might even exceed the recent flood flows."



City of Chicopee  
Parks & Playgrounds Department

-2-

We concur with the recommendations of our Engineer and direct that the water behind this dam be drawn down and remain drawn down until the dam is repaired and altered as necessary, and until plans and specifications outlining the proposed additions and alterations to the dam, as well as the repairs, are filed with this Board and approved.

In drawing down the pond, your attention is called to previous communications wherein it has been recommended that the pond be drawn down slowly in order that water in the voids of the soil of the dam in question, as well as the new dam, will not be drained too fast and thus subject the structures to possible sloughing of the saturated materials.

Any further information concerning this matter which you may desire will be furnished by this office upon request. Our County Hydraulic Engineer will be glad to assist you in making recommendations and in reviewing proposals for the repairs, additions and alterations to the dam.

Very truly yours,

HAMPDEN COUNTY COMMISSIONERS

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Chairman

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Registered Mail,  
Return receipt requested.

## RETURN RECEIPT

Received from the Postmaster the Registered or Insured Article, the number of which appears on the face of this Card.

1 [Signature]  
(Signature or name of addressee)

2 [Signature]  
(Signature of addressee's agent—Agent should enter addressee's name on line ONE above)

Date of delivery 8-29, 1953

November 25, 1964

City of Chicopee  
City Hall  
Chicopee, Massachusetts

Att: Park Commissioners

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your Lower Dam located at Bemis Pond has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"This dam was inactive when inspected and apparently has not been active this year. The embankment was found to be in fair condition. If the dam is to be reactivated, the embankment should be improved by the removal of weed growth and the promotion of sod. Stone and gravel surfaced areas would not be altered to obtain a grass growth. Irregularities on the face of the embankment should be graded, loamed and seeded as necessary.

The spillway shaft was found to be satisfactory and the drawdown gate open. At the overflow spillway located to the right of the embankment, the wing wall on the pond side of the dam is spalling badly at the left top and should be repaired if the dam is to be reactivated. Some spalling of concrete was noted on the spillway chute walls as well as on the spillway itself but the spalling is not of a serious nature as yet."

The work as recommended in the report of the County Hydraulic Engineer should be done in 1965 if this dam is to be reactivated. If the gate is to be kept open

and the pond empty, the recommended maintenance work can be delayed for a year or two.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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December 7, 1966

City of Chicopee  
City Hall  
Chicopee, Massachusetts

Attention: Park Commissioners

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your Lower Dam located at Bemis Pond has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The embankment and the heavy stone-filled toe were found to be okay. Brush and small tree growth should be cut from the embankment surface particularly at the left section of the embankment both on top and on the downstream face.

The emergency spillway at the right side of the dam was found to be satisfactory. Some concrete erosion was noted at the top of the upstream training wall but this condition is not serious as yet. The emergency spillway chute was in good condition and the concreted rock fill behind the right wall of the chute was okay.

The main spillway shaft was satisfactory. Water level was at the opening in the shaft. The conduit through the embankment was in good condition.

In the opinion of the undersigned, the dam is safe."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

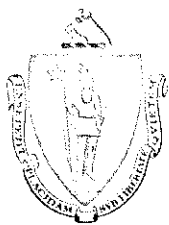
Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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Commonwealth of Massachusetts

COPY

# County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
52 State Street

William F. Stapleton  
Chairman

Ralph P. Walsh  
Floyd W. Fradet

December 4, 1968

City of Chicopee  
City Hall  
Chicopee, Massachusetts

Attn: Park Commissioners

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq., of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your Lower Dam located at Bemis Pond has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The bar rack at the shaft spillway inlet is plugged with debris. This material should be removed so that the spillway shaft can function properly and water level controlled to the correct elevation in the pond. On the slope of the embankment towards the pond and in the general vicinity of the spillway shaft, there are a number of tree stumps which should have the root structure killed or the stumps dug out.

The spillway at the right end of the dam and the concrete of the spillway chute below the spillway crest is becoming badly worn and eroded. Maintenance work should be done at these locations. The floor of the spillway chute is becoming quite poor.

The rock fill at the toe of the dam was in satisfactory condition. There were no flashboards on the spillway crest.

All brush growth occurring on the downstream face of the dam should be cleared, particularly from the area of the spillway chute. Weed

COPY

growth on the downstream face of the embankment is quite thick and maintenance work should be done to eliminate this growth and develop a good turf cover. The weed growth on the downstream face is so thick that a proper inspection of the surface of the embankment cannot be made.

The owner should be advised to properly maintain the dam. "

The recommendations of the County Hydraulic Engineer should be followed. Brush and debris collecting in front of the spillway opening should be cleared away periodically. The needed improvements to the embankment should be done in 1969.

Any further information concerning this matter which you may desire, will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
EDWARD W. BOND  
COUNTY HYDRAULIC ENGINEERS

**TIGHE  
& BOND**

**CONSULTING ENGINEERS**

CIVIL SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3 3991

CD Chicopee  
March 17, 1969

City of Chicopee  
Park Department  
City Hall  
Chicopee, Massachusetts

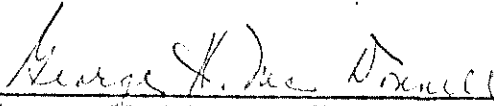
Gentlemen:

Reference is made to your dams located at Bemis Park in the City of Chicopee, and the fact that there now exists a heavy snow cover throughout Western Massachusetts. The water content of this snow cover, coupled with a warm spring rain could result in extremely heavy runoff conditions. Consequently, the Commissioners of Hampden County have directed that I advise you to be sure that the spillway facilities at your dams are clear of any obstruction and that you take all precautions necessary to protect your dams as well as persons and property downstream.

It is advisable that you also lower the water level of the stored water through use of drawdown gates, and that this lowering be done at this time under controlled conditions so as not to drop the water level at too fast a rate wherein the embankment of the dam might be damaged or the rate of discharge could cause temporary flooding downstream.

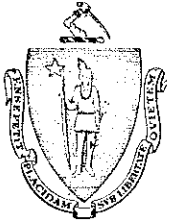
If you have any question in connection with this matter, the undersigned can be reached at the above address and telephone number.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/amd





Commonwealth of Massachusetts

# County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
52 State Street

William F. Stapleton  
Chairman

~~Raymond M. Moxley~~

Floyd W. Fradet

Stephen A. Moynahan

December 17, 1969

City of Chicopee  
City Hall  
Chicopee, Massachusetts

Attention: Park Commissioners

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq., of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your two dams located at Bemis Park has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

## "Upper Dam

The embankment forming this dam is in fair condition as to it shape. It is a narrow structure and the downstream surface of the embankment between the right spillway and the main spillway is quite rough and steep.

The three concrete spillway structures were noted to be okay although there has been some breaking and deterioration of concrete. This condition has not grown serious as yet to require repairs.

Stoplogs in the main spillway were only at the bottom level of the stoplog slot. Thus, the water level in storage behind the Upper Dam was at almost the same elevation as the water level in storage between the Upper Dam and the Lower Dam.

No debris was observed in any of the spillways. The bar racks which formerly were in the side spillways were removed some time ago based upon safety recommendations.

The foot bridge over the right auxillary spillway has been removed and the one at the left auxillary spillway is quite rotten and is deteriorating.

The toe area of the central portion of the embankment of this dam is partially flooded by water backed up from the pond below.

In the opinion of the undersigned, the dam is safe.

#### Lower Dam

The dam embankment is in the best condition observed in many years. The turf cover is fair, on many areas. Where the turf is poor or thin, loam, seed and fertilizer, should be applied in the spring of 1970.

Some burrow holes were observed on the dam embankment. What little growth is occurring should be cut again in 1970 and the existing old stumps from which much of the brush growth occurs, should be chemically killed or the stumps should be dug out.

On the day of inspection, water level in storage was low. The lower portal opening of the spillway shaft was operating. The trash rack in front of the opening was relatively clean. The spillway conduit through the embankment was in good condition.

The concrete of the emergency overflow spillway, located at the right side of the dam, is in need of repairs. Repairs should be made particularly where the erosion of the concrete is now so deep that reinforcing steel is exposed. All eroded areas should be thoroughly cleaned, rotten and loose concrete removed, and then proper concrete patching applied.

The toe area of the embankment and the rock fill at the toe were noted to be okay.

In the opinion of the undersigned, the dam is safe."

The recommendations of the County Hydraulic Engineer are called to your attention. It would be adviseable for you to improve the turf on the Lower Dam and to make the necessary repairs to the concrete of the emergency spillway.

Our Board appreciates the fact that the Lower Dam is in good condition insofar as the embankment turf and surface is concerned. Your attention to the recommendations made by the County Hydraulic Engineer and forwarded to you last year by this Board is appreciated.

Any other information concerning this matter which you may desire, will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

BY: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Chicopee City Parks Department Dam fka Bemis Pond Dam - Upper



1935 Chicopee

Also see: Chicopee City Parks Department Dam fka Bemis Pond Dam - Lower. See also: County Highways (Chicopee) "Bemis Pond Reinforcing Dam & New Spillway" - ch10090. See also: County Roads Plan #18 (1954) "Dam & Bathing Area - Szot Park" and Plan #22 (1957) "Bemis Pond Dam Reconstruction".

Abutters	Szot Park
City/Town	Chicopee
Dam	Bemis Pond Dam
Dam	Chicopee City Parks Department Dam - Upper
Dam	Chicopee City Parks Department Dam fka Bemis Pond Dam - Upper
Water	Bemis Pond

C125 014

CONSTRUCTION OF DAM AND BATHING AREA

AT

BEMIS POND, SZOT PARK, *Chicopee*

CONSTRUCTION OF DAM AND BATHING AREA

at

BEMIS FORD, SEOT PARK

\*\*\*\*\*

CHICOPPEE, MASSACHUSETTS

MAYOR WALTER J. TRYBULSKI

CHICOPPEE PARK COMMISSION

ARTHUR D. MAROTTE, CHAIRMAN

ANTHONY J. BEDNAREZ

ROLAND L. HENAUULT

WILLIAM T. BLANCHARD

JOHN LASKOWSKI

JOSEPH FURSTON, SUPERINTENDENT OF PARKS

\*\*\*\*\*

GORDON E. MACBELL ASSOCIATES, CONSULTING ENGINEERS

JOSEPH C. GRAY, A.I.A., A.I.P., ARCHITECT AND CITY PLANNER

GOLDENING LEMASSURIER ASSOCIATES

STRUCTURAL ENGINEERS

\*\*\*\*\*

FEBRUARY, 1954

PART ONE

SECTION A.

Instructions to Bidders  
Proposal Form for General Bidders  
Certificate as to Corporate Bidder  
Affidavit  
Contract

SECTION B.

General Scope of Work

PART TWO

Division I. Dam

Division II. General Site Work



SECTION A

INSTRUCTIONS TO BIDDERS

1. TITLE OF PROJECT

DAM AND BATHING AREA, DENNIS POND, SEOT PARK, CHICOPEE, MASSACHUSETTS  
Gordon E. MacNeill Associates, Consulting Engineers

2. SCOPE OF BID

The Board of Park Commissioners of the City of Chicopee, Massachusetts, (hereinafter called the "Owner") invites bids for the construction of a dam and bathing area at Dennis Pond, Seot Park, Chicopee, Massachusetts

3. SUBMISSION OF GENERAL BIDS

Sealed bids from general bidders will be received at the office of the Board of Park Commissioners, City Hall, Chicopee, Massachusetts

until \_\_\_\_\_ P.M. (E.S.T.) \_\_\_\_\_ 1954

and at that place and time will be publicly opened and read.

The bidders shall submit his bid for the project in a sealed envelope bearing on the outside the name of the bidder, his address, and the title of the project for which the bid is submitted. (If forwarded by mail the sealed envelope containing the bid, and marked as directed above, must be enclosed in another envelope addressed to the Board of Park Commissioners at City Hall, Chicopee, Massachusetts, preferably by registered mail.)

4. BID PREPARATION

Each general bidder shall make an initial deposit by registered check payable to the City of Chicopee, or cash, with the Board of Park Commissioners, City Hall, Chicopee, Massachusetts or with Gordon E. MacNeill Associates, Consulting Engineers, 561 Baylston Street, Boston, Massachusetts in the amount of twenty five (\$25.00) to receive one complete set of drawings and specifications for the project. All copies of drawings, specifications and addenda are the property of the consulting engineer and shall be returned within ten (10) days after the opening of bids. The initial deposit will be refunded only if the documents are returned in good condition.

Bidders shall thoroughly familiarize themselves with the drawings and specifications and shall visit the project site and carefully examine it and familiarize themselves with existing conditions. Existing elevations, locations, and conditions mentioned in the specifications or indicated on the drawings are given for general



information only and are not guaranteed by the owner. The bidder will be required to meet conditions as they exist and complete work indicated on drawings or called for in specifications at his own expense and without extra cost to the owner.

5. BONDS

The following bonds will be required:

A. Proposal Guaranty for General Bid. A proposal guaranty in the form of cash, a certified check, or a bid bond, in the amount of three per cent (3%) of the amount of each bid. This guaranty shall be payable to the City of Chicopee and shall be submitted by each general bidder with each of his bids.

This guaranty will be returned to all but the three lowest responsible and eligible bidders within ten days after the opening of bids, and to the remainder after the contract has been executed or, in case of the rejection of all bids, within thirty (30) days after the opening of bids. Should any bidder on the proposed work to whom an award is made fail to enter into the contract therefor within ten (10) days after notice of award has been mailed or delivered to him, the amount so received from such bidder through his cash or certified check or bid bond shall become and be the property of the City of Chicopee as liquidated damages.

B. Performance Bond for General Bid. A performance bond in the amount of one hundred per cent (100%) of the contract price, with a surety company approved by the Owner, will be required of the successful bidder. The cost of this bond is to be paid by the bidder.

E. Bidders are referred to the General Conditions for supplementary data on bonds and insurance.

6. BIDDING PROCEDURE

Bidding procedure shall be in accordance with the laws (Ter.Ed.) Chapter 149, Sections 44A through 44D, both inclusive.

A. The bidding procedure shall be as follows:

(a) Bids from general contractors shall be for the complete project as specified and the general contractor shall be selected on the basis of such bid.

7. ADDENDA

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the plans, specifications or other proposed contract documents, he may submit to the Consulting Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any

interpretation of, or addition to, the proposed documents will be made only by Addendum duly issued and a copy of such Addendum will be mailed or delivered to each person receiving a set of documents. The engineer will not be responsible for any other explanation or interpretation or additions. All Addenda to bidders are to be incorporated in the proposal and will become part of the contract documents.

#### 9. BID FORMS

Bidders are required to make their proposals in their pertinent form of the Proposal Form for General Bidders, copies of which are included in this Section.

The proposal must bear the written signature of the bidder. If the bidder is an individual doing business under a name other than his own name, the proposal must so state, giving the address of the individual. If the bidder is a partnership, the proposal must so state, setting forth the names and addresses of all partners and must be signed by a partner designated as such. If the bidder is a corporation, the proposal must bear the seal of the corporation and must be signed by a duly authorized officer or agent of such corporation, and the Certificate attached to the Form of Proposal must be executed and included.

Any bid which fails to name a price, both in words and in figures, per unit for each and every item wherein quantities are given, may be held to be informal and may be rejected, and in case of any discrepancy between the price written in words and that given in figures, the price written in words will be considered as bid. No alterations, erasures, or interlineations shall be made in the bid. Conditional bids will not be accepted.

The price or prices bid for the item or several items of the work shall include and cover the cost of furnishing all materials, labor and services necessary for the performance of all work set forth, described and shown in the proposal, specifications and on the drawings for the work.

#### 10. AWARD OF GENERAL CONTRACT

The general contract shall be awarded on the basis of competitive bids to the lowest responsible and eligible bidder within thirty (30) days of the date when the bids are opened. The Owner, as the awarding authority, reserves the right to reject any or all bids if it be in the public interest to do so.

The Owner may require the lowest bidder, and such other bidders as he may determine, to file with him a statement, sworn to by the bidder, setting forth the financial condition, present plant and equipment, working organization and prior experience of the bidder, and such other pertinent information as the Owner may deem reasonably necessary to determine the qualifications of the bidder. Such statements shall be returned to all except the successful bidder upon request. Such statement shall be for the use and information solely of the Owner.

The person or persons to whom the contract may be awarded will be required to execute the contract within ten (10) days from the date of the service of a notice to the effect that the contract has been awarded.

11. FORM OF CONTRACT

It is the intent that the contract be let on the basis of a stipulated sum.

Date of Completion of the contract for this project shall be June 15, 1954.

The Contractor will be required to complete the entire work to the satisfaction of the Owner, and in strict accordance with the plans, specifications and the contract. No compensation beyond the amount payable for the several classes of work and materials hereinafter enumerated which shall be actually performed and furnished at the prices therefor hereinafter stated, shall be due or payable for the entire work and materials.

The Contractor shall comply with the applicable laws of the Commonwealth of Massachusetts, by-laws of the City of Chicopee, Mass., and regulations of any other appropriate authority.

PROPOSAL FORM FOR GENERAL BIDDER

DAM AND BATHING AREA, SZOT PARK, BEMIS POND,

to: Board of Park Commissioners  
City Hall  
Chicopee, Massachusetts

(a) The undersigned proposes to furnish all the labor, materials and services required for the construction of the Dam and Bathing Area at Bemis Pond, Szot Park, Chicopee, Massachusetts, in accordance with the accompanying specifications and drawings prepared by Gordon E. MacNeill Associates, Consulting Engineers, 561 Boylston Street, Boston, Massachusetts, for the sum specified below, subject to additions and deductions according to the specifications and in all respects according to the terms thereof.

(b) The undersigned agrees that if within thirty (30) days from the day named for delivering the proposal to the awarding authority, notice that this proposal will be accepted by the Owner shall be mailed to him at the business address given below, or shall be delivered to him, he will, within ten days thereafter, deliver to the Owner where directed a contract properly executed in triplicate (or otherwise) in the forms annexed with such changes therein as shall have been made by the Owner prior to the time named for delivery of this proposal, together with a bond of a surety company satisfactory to the awarding authority in the sum of one hundred (100 per cent of the contract price, the premium for which is to be paid by the contractor and is included in the contract price.

(c) The proposed contract sum is \_\_\_\_\_  
\_\_\_\_\_(dollars ) (\$ \_\_\_\_\_).

(d) The undersigned further agrees that the certified check or bid cond or cash left with the Board of Park Commissioners shall become the property of the City of Chicopee, Mass., as liquidated damages, if, after an award is made to him, he shall fail to enter into a contract therefor within ten (10) days after notice of said award has been mailed or delivered to him.

The undersigned agrees to commence operations on the ~~dam~~ and bathing area within ten (10) days after being awarded a contract and to prosecute the work to completion, subject to extension of time due to delay caused by a strike or boycott for which the contractor is in no way responsible and which the contractor cannot reasonably avoid, on or before June 15, 1954.

In submitting this bid, it is understood that the Owner reserves the right to reject any or all bids of the general bidder and to waive any informalities in bidding if it be in the public interest to do so. It is also agreed that this bid may not be withdrawn prior to thirty (30) days from the date of the opening of the bids without the consent of the Owner.

The undersigned states that he has received Addenda numbered \_\_\_\_\_.

-----  
Bidder:

By:

Business Address:

Date:

The bidder is a \_\_\_\_\_  
Individual-Partnership-Corporation

The full names and addresses of all persons interested in this proposal, as principals, are as follows:

Individual Owner:

State full name and address of Owner. If business is carried on in any other name than that of the Owner, state such name and address:

Partnership:

State full name and address of all partners.

Corporation:

Corporation is incorporated in the State of

President is

Treasurer is

Place of business is

Note: This proposal must bear the written signature of the bidder.

If the bidder is an individual doing business under a name other than his own name, the proposal must so state giving the address of the individual.

If the bidder is a partnership, the proposal must state, setting forth the names and addresses of all partners and must be signed by a partner designated as such.

If the bidder is a corporation, the proposal must bear the seal of the corporation and must be signed by a duly authorized officer or agent of such corporation.

CERTIFICATE AS TO CORPORATE BIDDER

I, \_\_\_\_\_, certify that I  
am the \_\_\_\_\_ of the corporation named  
as a Bidder in the within Bid Form; that \_\_\_\_\_  
\_\_\_\_\_, who signed said Bid Form on behalf of the  
Bidder was then \_\_\_\_\_ of said corporation; that I  
know his signature; that his signature thereto is genuine and that said  
Bid Form was duly signed, sealed and executed for and in behalf of said  
corporation by authority of its governing body.

(CORPORATE SEAL)

\_\_\_\_\_  
Secretary - Clerk

Dated: \_\_\_\_\_

AFFIDAVIT

State of \_\_\_\_\_ }  
County of \_\_\_\_\_ }

\_\_\_\_\_, being first duly sworn, deposed and says:

That he is \_\_\_\_\_

(insert in line above your position as partner or officer and name of partnership or corporation), the party making the foregoing proposal or bid, that such bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed directly or indirectly with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or that of any other bidder, or to secure any advantage against the City of Chicopee or any person interested in the proposed contract; and that all statements contained in said proposal or bid are true.

\_\_\_\_\_  
(Name of bidder if the bidder is an individual)

\_\_\_\_\_  
(Name of partner if the bidder is a partnership)

\_\_\_\_\_  
(Name of officer if the bidder is a corporation)

Subscribed and sworn to this

\_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission expires \_\_\_\_\_



CITY OF CHICOPEE, MASS.

BOARD OF PARK COMMISSIONERS

CONTRACT

for

CONSTRUCTION OF A DAM AND BATHING AREA AT BEMIS POND

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 1954, by and between the City of Chicopee, Massachusetts, through its Board of Park Commissioners, duly authorized in the premises and acting solely for the City of Chicopee and without personal liability, either individually or collectively, party of the first part, and with legal address and principal place of business at \_\_\_\_\_ hereinafter designated as the Contractor, party of the second part:

WITNESSETH: That the parties to these presents, each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise and agree, the party of the first part for himself and for his successors and assigns, and the party of the second part for themselves and for their heirs, executors, administrators, successors and assigns, as follows:

Article I. Wherever the words defined in this article, or pronouns used in their stead, occur in this contract, and the specifications hereto attached, they shall have the meanings given.

Definitions

The word "Commission" shall mean the Board of Park Commissioners, of the City of Chicopee, Mass., or any agency or officer duly authorized to act in its place in the execution of the work required by this contract.

The word "Engineer" shall mean any person designated by the Board of Park Commissioners of the City of Chicopee, acting directly or through properly authorized agent, such agents acting within the scope of the particular duties entrusted to them.

The word "Contractor" shall mean the party of the second part, above designated, entering into this contract for the performance of the work required by it and the legal representatives of said party, or the agent appointed to act for said party in the performance of the work.

The word "Contract" shall mean, collectively, all of the covenants terms and stipulations in these articles of agreement, and in the supplementary documents hereto attached which constitute essential parts of the agreement, and are hereby made such parts thereof, to wit:

Advertisement  
Instructions to Bidders  
Proposal Forms  
Contract  
Specifications  
Contract Drawings

The word "Specifications" shall mean collectively all of the terms and stipulations contained in the general and detailed specifications appended to this agreement.

The words "Contract Drawings" shall mean the drawings hereto attached, together with such supplementary drawings as may be issued or approved by the Engineer from time to time as herein elsewhere provided.

Wherever in the specifications or upon the contract drawings the words directed, required, permitted, ordered, instructed, designated, prescribed, considered necessary, or words of like import are used, it shall be understood that the direction, requirement, permission, order, instruction, designation, prescription or decision of the Engineer is intended; and similarly the words approved, acceptable, satisfactory, or words of like import, shall mean approved by, or acceptable or satisfactory to the Engineer, unless another meaning is plainly intended.

Article II. The contractor shall do all the work and furnish all the materials, tools, labor and equipment necessary, proper and incidental to the construction of the dam and bathing area and required by the contract, in the manner, within the time, and for the consideration herein stipulated and agreed upon.

Work to be done.

Article III. All the work under this contract shall be done to the satisfaction of the Engineer, who shall in all cases determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for hereunder, and shall decide all questions which may arise as to measurement of quantities and the fulfillment of the conditions of this contract on the part....

Engineer to decide.

of the Contractor, and his determination and decision thereon shall be final and conclusive and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

Article IV. The work during its progress and upon its completion must conform with the Contract Drawings and Specifications, and with other directions of the Engineer, as given from time to time during the progress of the work, under the terms of this contract; in no case shall any work in excess of the requirements of the drawings be paid for unless authorized in writing by the Engineer or his agents especially authorized thereto.

Work to be done  
in accordance  
with drawings  
and specifica-  
tions

Article V. The Contractor shall commence the work after the contract has been executed by the City and upon notice from the Board of Park Commissioners or Engineer signifying that the work must be started.

Time and manner  
of doing work.

The Contractor shall prosecute the work as directed by the Engineer until completion.

The Date of Completion shall be the date of the final estimate prepared under the conditions herein specified.

The Contractor shall commence the work at such points and shall thereafter continue at such points and in such order or precedence as the Engineer may approve.

Article VI. If the Contractor is obstructed or delayed in the prosecution or completion of the work by any damage that may happen thereto by the unusual action of the elements, or by the abandonment of the work by the Employees in a general strike, the Contractor shall have no claim for damage for any such cause or delay, but he shall in such case be entitled to such extension of time specified herein for the completion of the work as the Engineer shall in writing certify to be just and proper; provided, however, that claim for such extension of time is made by the Contractor in writing within one (1) month from the time when such alleged cause for delay shall occur.

Extension of time

Article VII. The Contract Drawings and Specifications are intended to be explanatory of each other, but should any discrepancy appear or any misunderstanding arise as to the import of anything contained in either, the explanation of the Engineer shall, in all cases, be final and binding upon the Contractor. Any corrections of errors or omissions in the Drawings and Specifications may be made by the Engineer when such correction is necessary for the proper fulfillment of their intention as determined by him

Drawings and  
Specifications  
mutually  
explanatory

Article VIII. This contract and the specifications herein contained and the drawings herein referred to, may be changed from time to time as may be agreed in writing between the parties hereto, in a manner not materially affecting the substance thereof nor materially increasing the amount to be paid, in order to carry out and complete more fully and perfectly the work herein agreed to be done and performed.

Changes

Article IX. In case work other than that specified shall be found necessary, the Contractor shall perform the whole or such portion of such work as the Engineer may require, and agrees to accept as full compensation for such extra work the actual and necessary net cost of the work as determined by the Engineer, plus fifteen (15) per cent, of such cost. Such actual net cost shall cover all labor and materials necessary for the performance of the extra work, including any extraordinary expenses incurred directly on account thereof, the wages of foreman and the expense attached to the Contractor's liability insurance covering the labor so employed. In computing such net cost, however, no interest, rent or depreciation of plant, nor services of a general superintendent or administrative force shall be included; the allowance of fifteen (15) per cent shall include all such expense for superintendence, administration, interest, rent depreciation, general expenses of plant and contingencies; and shall include all profit. The Contractor shall, before the tenth day of the month succeeding that in which any extra work shall have been performed, file with the Engineer an account giving the itemized cost of such extra work, and shall give the Engineer access to all accounts, bills and vouchers relating thereto. In case the Contractor fails to file, at the time above mentioned, such account for extra work, he shall have no claim for compensation for the same against the Commission, over and above the allowance certified by the Engineer. No extra work will be paid for unless ordered in writing by the Engineer.

Article X If the Contractor claims compensation for any damage alleged to have been sustained by reason of any act or omission of the Commission or any of its agents, he shall, within one (1) week after the sustaining of such damage, make a written statement to the Commission of the nature of the damage sustained, and shall, on or before the fifteenth (15th) day of the month succeeding that in which any such damage shall have been sustained, file with the Engineer an itemized statement of the details and amounts of such damage, and unless such statements shall be made as so required, his claim for compensation shall be forfeited and invalid, and he shall not be entitled to payment for any damage.

Contractor's  
claims for  
damage.

Article XI. The Contractor shall keep the work under his personal control, and shall not assign, transfer, convey, sublet or otherwise dispose of this contract, or his right, title or interest in or to the same or any part thereof, without the previous consent in writing of the Commission, and he shall not assign, by Power of Attorney or otherwise, any of the moneys to become due and payable under this contract, unless by and with the like consent of the Commission; provided that nothing herein contained shall be construed or hinder, prevent, or affect an assignment by the Contractor for the benefit of his creditors, made pursuant to existing statutes of the Commonwealth of Massachusetts.

Not to sublet  
or assign.

Article XII. The Contractor shall give his personal attention constantly to the faithful prosecution of the work, and shall be present, either in person or by a duly authorized representative, on the site of the work, continually during its progress; such representative shall have authority to receive and to act without delay upon all instructions of the Engineer or his assistants in the prosecution of the work in conformity with this contract.

Representative  
on work.

Article XIII. The Commission and the Engineer and other agents and employees of the Commission may for any purpose, and its other contractors may for all purposes required by their contract, enter upon the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor. Any differences or conflicts which may arise between the Contractor and other contractors or agents of the Commission in regard to their work shall be adjusted and determined by the Engineer.

Access to work  
and to places  
of manufacture.

Furthermore, the Commission and the Engineer and their assistants and agents shall, at all times, have access to all places where materials are being prepared for use under this contract, and shall have full facilities for unrestricted inspection of such materials.

Article XIV. The contractor shall provide the services and equipment of competent personnel to provide lines and grades for the work and shall be responsible for their accuracy.

Lines and grades.

Article XV. Whenever the Contractor is not present on any part of the work where it may be desired to give directions, orders may be given by the Engineer and shall be received and obeyed by the Superintendent or foreman who may have charge of the particular work upon which the orders are given.

Orders

Article XVI. The Contractor shall employ only competent and skillful men to do the work, and whenever the Engineer shall notify the Contractor, in writing, that any man on the work is, in his opinion, incompetent, unfaithful or disorderly, or in any other way unsatisfactory, such man shall be discharged from the work and not again employed on it except with the consent of the Engineer.

Competent help  
to be employed.

Article XVII. The Contractor shall keep himself fully informed of all laws, ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency shall be discovered in this contract, or in the drawings or specifications herein referred to, in relation to any such law, ordinance, regulation, order, or decree, he shall forthwith report the same in writing to the Engineer. He shall at all times himself observe and comply with, and shall cause all his agents and employees to observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees; and shall protect and indemnify the Commission and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or by his employees.

Regulations  
Laws and  
Ordinances

Article XVIII. Nothing in the contract shall be considered as vesting in the Contractor any right of property in materials used, after they shall have been attached or affixed to the work or soil, nor in materials which have been estimated for partial payment, but all such materials shall, upon being so attached or affixed, or estimated, become the property of the Commission.

Right of property  
in materials

Article XIX. Inspection of the work shall not relieve the Contractor from any of his obligations to fulfill the contract as herein described, and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work, or selected therefor, shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith move such material from the vicinity of the work. If the Contractor shall fail to remove or replace any defective or damaged materials or work after reasonable notice, the Engineer may cause such materials or work to be removed or replaced, and the expense thereof shall be borne by the Contractor.

Defective work

Article XX. If the work to be done under this contract shall be abandoned, or if this contract shall be sublet or the contract or any claim thereunder shall be assigned by the Contractor otherwise than as heretofore specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the Commission, that the conditions herein as to the rate of progress are not fulfilled or that the work, or any part thereof, is unnecessarily or unreasonably delayed, or the Contractor is violating any of the provisions of this contract, that Commission may notify the Contractor to discontinue all work, or any part thereof, and thereupon the Contractor shall discontinue such work or such part thereof as the Commission may designate, and the Commission may thereupon, by contract or otherwise, as it may determine, complete the work, or such part thereof, and charge the expense thereof to the Contractor, and may take possession of and use therein such materials, animals, machinery, equipment, implements and tools of every description as may be found upon the site of said work. The expenses so charged shall be deducted and paid by the Commission out of any or any part of money then due or to become due the Contractor under this contract, or any part thereof; and in case such expense is less than the sum which would have been payable under this contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expense shall exceed that latter sum the Contractor, or in case of his default, his surety, shall pay the amount of such excess to the City of Chicago.

Conditions  
under which the  
Commission may  
complete the work

Article XXI. The Contractor shall take all responsibility of the work and shall take precautions for preventing injuries to persons and property in or about the work; shall bear all losses resulting to him on account of the nature of the land in or on which the work is done if different from what was estimated or expected, or on account of the weather, elements or other causes; shall cover and protect the work from damage by flood or frost action, and all injury to the same before the completion of the contract shall be made good by him; and he shall assume the defense of and indemnify and save harmless the Commission from all claims, likewise each member of the Commission and its officers and agents, relating to labor or materials furnished for the work; to inventions, patents and patent rights used in the work or in doing the work; to injuries to any person or corporation received or sustained by any act of the Contractor or his employees in doing the work, or in consequence of any improper materials, implements or labor used therein; and to any act, omission or neglect of the Contractor and his employees therein.

Responsibility  
Of Contractors  
Indemnity etc.

Article XXII. The Commission may keep any moneys which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefor, to the payment of any expenses, losses or damages incurred by the Commission and determined as herein provided, and may retain until all claims are settled so much of the moneys as the Commission shall be of the opinion will be required to settle all claims of the nature specified in Article XXI against the Commission and its officers and agents, and all claims for labor or materials for the work, notice of which, signed and sworn to be the claimants, shall have been filed in the office of the Commission. The Commission may also with the written consent of the Contractor, use any money retained, due or to become due under this contract, for the purpose of paying for labor or materials for the work.

Money may be retained.

Article XXIII. The Commission shall pay and the Contractor shall accept as full compensation for everything furnished and done by the Contractor under this contract, and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all rights of every description connected with the work, and for all expenses incurred by or in the consequence of the suspension or discontinuance of the work as herein specified, and for well and faithfully completing the work, and the whole thereof, as herein provided, the sum of

Price of work.

Article XXIV. In order to assist the Contractor to prosecute the work advantageously, the Engineer shall, from time to time during the active progress of the work and generally once each month, make in writing an estimate, such as in his opinion shall be just and fair, of the amount of work done to the time of such estimate and the value thereof in accordance with the terms of the contract.

Partial estimates and payments.

Upon such partial estimate being made and certified in writing to the Commission, the Commission shall retain ten (10) per cent, of the total estimated valuation as part security for the fulfillment of the contract on the part of the Contractor, and shall pay to the Contractor prior to the fifteenth day of the month after the date of the estimate the balance not retained as aforesaid after deducting therefrom all previous payments and all amounts to be kept or retained under the provisions of this contract or as may be authorized or required by any law of the Commonwealth of Massachusetts.

Payments may at any time be withheld if the work is not proceeding in accordance with the contract, and at the option of the Commission estimates may be made more frequently and a smaller amount may be retained than as aforesaid.



Article XXV. Whenever in the opinion of the Engineer the Contractor shall have completely performed the contract on his part, the Engineer shall so certify in writing to the Commission and shall submit a final estimate of the total amount of work done by the Contractor, and of the value of such work under and according to the terms of this contract. Upon the expiration of thirty (30) days after the date of acceptance of the work by the Commission, the Commission shall pay to the Contractor the entire sum so found to be due hereunder, after deducting therefrom all previous and all amounts to be kept or retained under the provisions of this contract.

Final estimate  
and payment

All prior partial estimates and payments shall be subject to correction in the final estimate and payment; the final estimate and the measurements upon which it is based may be made without notice thereof to the Contractor.

Article XXVI. Neither the acceptance of the Commission or its Engineer, or any of its employees, nor any order, measurement or certificate by the Engineer, nor any order by the Commission for payment of money, nor any payment for, nor acceptance of the whole or any part of the work by the Engineer or the Commission, nor any extension of time, nor any possession taken by the Commission or its employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the Commission, or of any right to damages herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach. All remedies provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided.

Waivers

Article XXVII. No person, firm or corporation, other than the signer of this contract as Contractor, now has any interest hereunder, and no claim shall be made or be valid, and neither the Commission nor any of its agents shall be liable for or be held to pay any money, except as provided in Articles VIII, IX, X, XXIII, XXIV, and XXV. The acceptance by the Contractor of the final payment aforesaid shall operate as, and shall be, a release to the Commission and its agents, from all claim and liability to the Contractor for anything done or furnished for, or relating to, the work or for any act or neglect of the commission or of any person relating to or affecting the work.

Final payment  
to terminate  
liability of  
commission.

Article XXVIII. Public Employee May Select Lodging:  
Every employee in public work shall lodge, board and trade where and with whom he elects; and no person or his agents or employees under contract with the Commonwealth, a county, city or town, or with a department, board commission or officer acting therefor, for the doing of public work shall directly or indirectly require, as a condition of employment therein, that the employee shall lodge, board or trade at a particular place or with a particular person, and all as provided in Chapter 149, Section 25, of the General Laws, as amended.

which said Chapter and Section are made a part hereof as if at length set forth herein.

Article XXXIII. Performance Bond: The Contractor shall furnish to the City bond of security, in an amount equal in full to the sum payable of all the terms and conditions of the CONTRACT, and the payment of all obligations arising thereunder, and as required by the Charter of the City of Chicopee as set forth in the Acts of 1897, Chapter 239, Section 88, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein, and the premium for such bond shall be paid by the Contractor.

The Performance and Labor and Material Bonds may be made up in one instrument.

Article XXXIV. In doing the contemplated work under this contract, preference shall be given to citizens of Chicopee.

Article XXXV. Both the address given in the bid or proposal upon which this contract is founded and the Contractor's office at or near the site of the work are hereby designated as places to either of which notices, letters and other communications to the Contractor shall be mailed or delivered. The delivering at either of the above named places, or depositing, in a postpaid wrapper directed to the first named place, in any Post Office box regularly maintained by the Post Office, of any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor and the date of said service shall be the date of such delivery or mailing. The first named address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the Commission. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

Article XXIX. Preference to Veterans and Citizens: In the employment of mechanics, teamsters, chauffeurs and laborers in the construction of public works by the Commonwealth, or by a county, town or district, or by persons contracting or sub-contracting for such works, preference shall first be given to citizens of the Commonwealth who have served in the Army or Navy of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the Commonwealth generally, and, if they cannot be obtained in sufficient numbers, then to citizens of the United States, and all as required by the General Laws, Chapter 149, Section 26, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein.

Article XXX. Hours and Days of Employment: With regard to the persons in his employ, the Contractor shall comply with the provisions of General Laws, Chapter 149, Section 34, as amended, which reads as follows:

"Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen or mechanics, foremen or inspectors, to which the Commonwealth or any county or any town, subject to Section 30 is a party, shall contain a stipulation that no laborers, workmen, or mechanic, foreman or inspector, working within the Commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty eight hours in any one week, or more than six days in any one week, except in cases of emergency, or in case any town subject to Section 31 is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided that in contracts entered into by the Department of Public Works for the construction or reconstruction of highways there may be inserted in said stipulations a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workmen, mechanics foremen and inspectors, for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the Commissioner of Labor and Industries public necessity so requires. Every such contract not containing the aforesaid shall be null and void."

Article XXXI. Workmen's Compensation: The Contractor shall before commencing performance of the Contract herein entered into, provide by insurance for the payment of compensation and the furnishing of other benefits under General Laws, Chapter 149, Section 34A, as amended, to all persons being employed under the Contract and the Contractor shall continue such insurance in full force and effect during the term of the within contract, as required by General Laws, Chapter 149, Section 34A, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein.

IN WITNESS WHEREOF, on the day and year first above written, the City of Chicopee has caused its corporate seal to be hereto affixed, and these presents to be signed in its name and behalf by its BOARD OF PARK COMMISSIONERS, and

hereunto set their individual hands and seals, this being one of four counter-part originals of the within agreement, all being executed as aforesaid, and constituting together one and the same agreement.

CITY OF CHICOPÉE

Approved:

\_\_\_\_\_  
MAYOR

Approved as to form .

\_\_\_\_\_  
City Solicitor

\_\_\_\_\_  
BOARD OF PARK COMMISSIONERS

COMMONWEALTH OF MASSACHUSETTS

Hamden, ss.

Chicopee, \_\_\_\_\_ A.D. 1954

Then personally appeared above named \_\_\_\_\_, known  
to me, and made oath that he, the said \_\_\_\_\_  
and the duly appointed and  
qualified members of the BOARD OF PARK COMMISSIONERS of the City of  
Chicopee, and that each of them subscribed his name to the foregoing  
instrument, in execution of such instrument, in accordance with the  
authority of law conferred upon them, before me,

\_\_\_\_\_  
Notary Public (SEAL)

Commission expires \_\_\_\_\_

COMMONWEALTH OF MASSACHUSETTS

\_\_\_\_\_, ss. \_\_\_\_\_, 1954

Then personally appeared the above named \_\_\_\_\_  
known to me to be the  
described in and who executed the foregoing instrument, before me,

\_\_\_\_\_  
Notary Public (seal)

Commission Expires \_\_\_\_\_

I, the undersigned, the duly authorized and acting legal representative of the City of Chicopee, Massachusetts, do hereby certify as follows:

I have examined the foregoing contract and surety bond and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representative; that said representative has full power and authority to execute agreements on behalf of the respective parties named thereon; and that the foregoing agreement constitutes valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions and provision thereof.

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(Title)

## SECTION B

### GENERAL SCOPE OF WORK

#### 1. SITE

The Contractor shall accept the premises in their present condition.

#### 2. GENERAL

Certain work in connection with the construction of the bathing area has been completed. This work has altered the existing contour as indicated on plans. Work outside the scope of this contract will be carried on simultaneously with the work under this contract. The contractor shall cooperate with other contractors and City employees to coordinate his work with theirs to ensure completion of all work in the area without unnecessary delay.

The work to be done under this contract includes all labor, materials and equipment to complete all work required for the construction of the dam and bathing area and associated facilities to complete the work shown in the drawings in strict accordance with the Drawings and Specifications, together with any Addenda which may be issued during the bidding period.

The work includes handling of sub-surface conditions which may be encountered at no additional cost to the owner.

The work also will include handling of sub-surface conditions which may be encountered at no additional cost to the owner.

The work also will include later instructions, modifications to, additions to or deletions from the contract as agreed by the Owner and the Contractor during the construction period in accordance with procedures described in these specifications.

Items of work not included in this contract but shown on the plans are noted on the drawings.

#### 3. TESTS

The General Contractor shall assume the overall responsibility with respect to the Owner, for the performance of all tests included in the Specifications, and for the performance and costs of all tests, for which responsibility is not specifically assigned to others, required to establish the specified characteristics of all materials.

#### 4. BONDS

Bonds will be required as called for in the Instructions to Bidders.

5. PERMITS

All building permits, certificates, and licenses shall be paid for by the Contractor.

6. TEMPORARY TOILETS

The Contractor shall provide and maintain temporary sanitary toilets adequate for the use of all employees and in conformity with the requirements of pertinent Codes and Regulations.

7. TEMPORARY WATER SUPPLY

The Contractor shall provide and pay for all water required for the construction work and shall furnish all necessary connections, equipment and labor for installing and maintaining the same, including that required for fire protection during the project work.

8. TEMPORARY LIGHT AND POWER

The Contractor shall provide and pay for all electric energy for light and power as required to complete the work of the Contract, including the labor and materials for temporary wiring, fixtures, transformers and other equipment.

9. TEMPORARY HEAT

The Contractor shall provide and pay for all special equipment and for the fuel and service for temporary heating as required for the proper protection and drying of all work. The method of providing temporary heating shall be subject to the approval of the Engineer.

10. STORAGE OF OILS AND GASOLINE

The storage on the Project site of any and all oils, gasoline, or other combustibles, shall be subject to the requirements of pertinent authorities having jurisdiction.

11. WINTER CONDITIONS

The General Contractor shall assume responsibility with respect to the Owner for the erection and maintenance in operation of all structures and facilities required for the protection and continuance of work during winter conditions.

12. PROTECTION

Article 12, Protection of Work and Property, of the General Conditions, shall be and is supplemented as follows:

- a. General: The recommendations of the Manual of Accident Prevention in Construction, latest edition, published by the Associated General Contractors of America, are hereby made a part of this specification to the extent that such recommendations are not in contravention of applicable laws.



- b. Fire Protection: The Contractor shall provide and maintain in good working order under all conditions, suitable and adequate fire protection equipment and services, approved by the Clerk of the Works.
- c. Watchman: The Contractor shall maintain adequate watchman services for the duration of the project and shall be responsible, with respect to the Owner, for all materials and equipment on the site. He shall make good, at his own expense, all damage or loss to the structures.

13. ENGINEER

The Contractor shall employ, within the terms of his contract, a qualified engineer, who shall lay out the site improvements, establish grades and levels and a permanent bench mark, and do the usual engineering works as required, including levelling and checking.

14. INTENT OF DOCUMENTS

It is the intent that all materials shall be furnished and all work accomplished in strict accordance with the grades of materials, standards of workmanship, and Standard Specifications listed or mentioned in the documents of the contract. Materials shall be free from defects impairing strength, durability or appearance.

The mention of any method of installation, erection, fabrication, or workmanship shall not operate to make the Contractor an agent, but shall be for the sole purpose of establishing a standard of quality.

15. SPECIFICATION ARRANGEMENT

The separation of the specifications into Divisions is for convenience of reference only and is not intended to limit or prescribe contracts between the Contractor and Sub-contractor.

16. GUARANTY-WARRANTY

The Contractor shall guarantee all work as called for in the Divisions of this specification, whether performed by himself or by his subcontractors, for one year from the date of substantial completion.

The phrase "one year from date of substantial completion" shall be interpreted to mean one year from the date of final acceptance of the entire project by the Owner.

17. SCHEDULE OF MINIMUM WAGES

The following minimum hourly wage rates have been established by the Commissioner of Labor and Industries in accordance with Chapter 149 and 461 of the General Laws of the Commonwealth of Massachusetts. They shall be kept posted in a conspicuous place through the entire time work is in progress.

OCCUPATIONS	RATE PER HOUR
Crane Operator	2.65
Power Shovel Operator	2.65
Bulldozer Operator	2.15
Compressor Operator:	
220 cu.ft. or less	1.75
Over 220 cu.ft.	2.15
Jack Hammer Operator	1.52-1/2
Roller Operator	2.15
Pumpman	2.15
Cement Finisher	2.97-1/2
Stone Mason	2.97-1/2
Mason Tender	1.52-1/2
Carpenter	2.42-1/2
Pile Driver & Cofferdam	
Builder	2.75
Iron Worker	3.05-1/2
Blaster	1.65
Truck Driver	1.89-1/2
Asphalt Raker	1.52-1/2
Curb Setter	2.27-1/2
Common Laborer	1.52-1/2
Water Boy	.75
Electrician	2.73-1/2
Operator of 3 axle equip.	1.95

In conformity with the provisions of the Labor Laws of the Commonwealth of Massachusetts, the minimum wages for a day's work paid to craftsmen, teamsters, mechanics and laborers shall not be less than those established by the above schedule which has been prepared by the Department of Labor & Industries, and which is included in the proposed Contract documents. The Owner and/or Architect assume no responsibility for the accuracy of the rates set forth in this schedule, and no claim for additional compensation will be considered because of any inaccuracy in the rates set forth herein.

## DIVISION I

### DAM

#### 1-1 GENERAL

The General Conditions of the General Contract Specifications apply to all work done under this contract and are hereby made a part of this specification.

#### 1-2 SCOPE

The work to be done under this division of the Specifications includes the furnishing of all equipment, material and labor for the preparation of the foundation of the dam by removing all silt and unsuitable material to provide a proper base of suitable material, the construction of the reinforced concrete flume, the construction of the earth dam from material on the site, the construction of two reinforced spillway channels, the installation of chlorination lines, heads, etc. The construction of the gravel drive across the top of dam including bridges across spillway channels.

#### 1-3 EXISTING CONDITIONS

Silt from the pond bottom including the area of the proposed dam has been removed during the past year. However, since the pond has again been flooded, care in draining the pond must be exercised to prevent the wash of silt from above the dam location into the dam foundation area and over the new sand bottom of the bathing area. The pond shall be drained through the new 16" outlet and valve in the existing dam. This contractor shall remove any and all silt washed into the area to the Engineer's satisfaction before starting construction of the dam.

A section of flume foundation 55' long is now in place and shall be extended as shown on the plans.

The Owner has purchased and has available for use in the flume certain reinforcing steel a list of which is included in these specifications. This Contractor shall accept and use this steel and furnish and install the additional steel required to complete construction as shown on the drawings. Past experience indicates that the pond level may be sufficiently lowered to allow construction of the flume. The flow of water may then be diverted through the flume while the dam construction is completed.

1-4 PREPARATION OF BASE FOR DAM

The Contractor shall remove all silt, loam and unsuitable material from foundation and waste this material as directed by the Engineer. Borings indicated suitable material approximately three (3) feet below original bed of the pond. The dam shall be constructed on an undisturbed natural base.

1-5 CONCRETE FLUME

A. Materials:

- a. Portland cement shall conform to ASTM Standard Specifications for Portland Cement, "C-150-49 Type I.
- b. Aggregates for Concrete shall conform to ASTM "Standard Specifications for Concrete Aggregates" C-33-49 or light weight aggregates C-130-42
- c. Water shall be clean, and free from injurious amounts of oils, acids, alkalies, organic materials, or other deleterious substances.
- d. Metal reinforcement shall be deformed bars, conforming to one of the ASTM "Standard Specifications for Billet-Steel, Rail-Steel, or Axle Steel Bars, or Cold-Drawn Steel Wire, or Welded Steel Wire Fabric for Concrete Reinforcement" Numbers A-15-46, A-16-46, A-160-46, A-82-46, A-185-46.
- e. Metal accessories, including spacers, chairs, ties, and other devices necessary for properly assembling, placing, spacing and supporting all reinforcement in place shall be provided. All chairs in contact with forms shall be hot-dip galvanized with rounded legs.

B. Testing and Inspection of Materials:

Tests of concrete and materials shall be made under direction of the Engineer who shall have access to all places where concrete materials are stored, proportioned or mixed. The Contractor shall assist in obtaining and storing of samples for testing. THE CONTRACTOR SHALL PAY FOR ALL TESTING.

C. Storage of Materials:

Cement and aggregates shall be stored in such a manner as to prevent deterioration or intrusion of foreign matter. Any materials which have deteriorated or has been damaged shall not be used for concrete.

D. Proportioning and Mixing:

- a. Job mixed concrete shall be composed of one part cement, 2 parts fine aggregate and not more than 3 parts of coarse aggregate. Mixing water shall not exceed 6 gallons per sack of cement, including the free water in the aggregates. Mixing shall be continued for at least one minute after all materials are in the mixer.
- b. "Ready-mix" concrete may be used. Certificates shall be furnished by the mixing plant that the concrete has a minimum 28 day compressive strength of 3000 pounds per square inch when tested by methods described in ASTM Standard C-39-44.

E. Forms:

Forms shall conform to the shape, lines, and dimensions of members called for on plans, and shall be sufficiently substantial and tight to prevent leakage of mortar. They shall be properly braced or tied together to maintain their position and shape and be removable without damage to the concrete. Forms for footings may be omitted when soil and workmanship permit accurate excavation to size, subject to the approval of the Engineer.

F. Reinforcement:

Reinforcement shall be free from excessive scale, rust or coatings that will reduce the bond to the concrete. Bars shall be accurately bent and placed in positions shown on drawings, securely supported and fastened, to prevent movement during placement of concrete.

- a. Shop drawings shall be furnished to the Engineer for approval.

G. Depositing Concrete:

- a. Soil bottoms for footings and slabs shall be approved by the Engineer before placing concrete.
- b. Remove water and foreign matter from forms and excavations. Unless otherwise directed, wood forms shall be thoroughly wetted just prior to placing concrete.
- c. Deposit concrete as nearly as practicable in its final position to avoid segregation due to re-handling or flowing.
- d. Retempering- No concrete that has partially hardened, become contaminated for foreign materials, or has been retempered, shall be used.

- e. Continuity of Placing. Concreting shall generally be carried on as a continuous operation until the placing of an individual section is completed. When construction joints are necessary they shall be made and located with the approval of the Engineer.
- f. Compaction. Concrete shall be thoroughly compacted by suitable means during placement, and shall be carefully worked around reinforcement and embedded fixtures, along surfaces and into the corners of forms. Vibrators may be used, provided they are operated under experienced supervision and forms are constructed to withstand their action.
- g. Cleaning Concrete Construction Joints. Before placing concrete adjoining construction joints in walls or slabs, the surface of the concrete already in place shall be picked brushed clean and given a coat of neat cement grout to provide a proper bond.
- h. Metal form ties shall be cut off at least 3/4 inch deep in the concrete immediately after removal of forms, and holes filled with 1:3 cement and sand mortar approximately the same color as the concrete. Mortar shall be mixed and placed as dry as practicable, and finish flush with adjacent surface. No snapties shall be used.

H. Curing:

- a. Protect all concrete work and cement finishes against injury from the elements and defacement of any nature during construction operations.
- b. Curing. All concrete shall be maintained in a moist condition for at least the first seven days after placing. One of the following methods shall be used for curing unless another equally efficient method is approved by the Engineer.
  - (1) Burlap Cover. Keep the slab wet by light sprinkling for the first twelve hours, and then cover with two layers of burlap kept continuously wet for the curing period.
  - (2) Paper Cover. Immediately following an initial 12 hours sprinkling period, the surface shall be covered with a strong kraft waterproof paper (Federal Specifications UU-1/4-147 Type IV Class C), with perimeter edges carefully lapped and weighted, and left in place for the balance of the curing period.

J. Cold Weather Requirement:

Adequate equipment shall be provided for heating the concrete materials and protecting the concrete during freezing or near freezing weather. Concrete materials and reinforcement, forms fillers and ground with which the concrete is to come in contact, shall be free from frost. Whenever the temperature of the surrounding air is below 40°F., concrete shall have a temperature of between 60°F and 90°F when placed in the forms, and shall be maintained at a temperature of not less than 50°F for at least 72 hours or for as much more time as is necessary to insure a proper rate of curing of the concrete. The covering protection used in connection with curing shall remain in place, and intact, at least 24 hours after artificial heating is discontinued.

K. General requirements:

The contractor shall furnish and install all concrete, forms, reinforcing steel and related items required to complete the work indicated on the drawings and specified herein. Flume walls may be built in sections as approved by the Engineer. All forms must be removed before placing and compacting adjacent fill.

1-6 EARTH DAM

A. Material:

Borings and Soil Laboratory Analysis indicate that an adequate supply of suitable material is available on the site. Material will be selected by the Engineer and shall be deposited in accordance with his instructions.

1-7 DEPOSITING AND COMPACTION

Earth for the dam shall be deposited in 8 to 10 inch layers and thoroughly compacted with at least 8 passes of equipment to the Engineer's satisfaction. At the time of placing, the soil shall have a water content of 12-16% and shall attain a dry unit weight of 110 pcf. After 4 feet of fill has been placed tests will be made by the Engineer to verify water contents and unit weights and any changes in compacting procedure will be made at this time.

1-8 SPILLWAY CHANNELS

Refer to the drawings for plans and details of the reinforced concrete spillway channels. Construction shall meet all of the requirements specified herein for the concrete flume.

1-9 CHLORINATION LINES

This contractor shall furnish and install Polyethylene flexible pipe and Polystyrene fittings as indicated on the plans from outlet of chlorinizer equipment in chlorinator room to outlets in flume and lower face of dam.

This contractor shall furnish and install two 3/4" NPT cork type diffusers with silver or Uscolite injection tubes and one diffuser, channel type for 3/4" connection mounted in flume.

The complete installation shall be made in accordance with requirements of the manufacturer of chlorinizer equipment.

Chlorinizer equipment and installation in the chlorinator room will be done by others under another contractor which will be underway at the same time as this contract.



## DIVISION II

### GENERAL SITE WORK

#### 2-1 GENERAL

The General Conditions of the General Contract Specifications apply to all work done under this contract and are hereby made a part of this specification.

#### 2-2 SCOPE

Under this division of the specification the contractor shall complete all work specified herein or indicated on the plans not specifically included in any other division or not noted on the plans as being done by others. This work includes stripping, grading, seeding and sodding, driveways, parking area, concrete splash pad, cleanup of general site area, fencing etc.

#### 2-3 STRIPPING

This contractor shall remove and stockpile where directed existing loam from areas to be disturbed during construction of the dam and bathing area. He shall strip and stockpile where directed all material unsuitable for construction of the dam which prevents access to suitable material. Such material unsuitable for dam construction may be used for grading general site areas as required but the excess of any shall be removed from the site.

#### 2-4 GRADING

This contractor shall grade the site as indicated on the plans to required subgrades.

Subgrades shall be as follows:

Sand areas 1'0" below finish grade.

Lawn areas 4" below finish grade.

Driveways and Parking Areas 8" below finish grade.

All areas from which material for construction of the dam is taken shall be graded to uniform slopes not exceeding 3:1 and in a manner to provide proper and adequate drainage to the satisfaction of the Engineer. Such areas unless specifically otherwise designated on the plans shall become lawn areas.

#### 2-5 SEEDING AND SODDING

All areas designated on the plans and other areas where cover is disturbed during construction of the work not specifically designated as other than lawn areas shall be treated as lawn areas and shall be sodded or seeded as required herein.

The top of the new dam as designated on the plans and all areas having a slope 2:1 or greater shall be sodded. Remaining lawn areas shall be seeded.

Sod shall be established loam sod, strongly rooted and free of all weeds and unsuitable grasses. It shall be mowed before lifting and have not less than one inch of soil,

Subgrade shall be established at four inches below finish grade and lime shall be applied at the rate of 50 pounds to 1000 square feet,

Topsoil shall be spread and lightly compacted to within the thickness of the sod and finished grade. No top soil shall be spread in a frozen or muddy condition.

Sod shall be laid so that no void occurs and shall be tamped or rolled. Screened top soil shall be brushed or raked over the sod area and shall include commercial fertilizer at the rate of 50 pounds to 1000 square feet. Sod shall than be thoroughly watered. The completed sod surface shall be true to finish grade even and firm at all points.

Sod on slopes steeper than 2-1/2 to 1 shall be held in place by wooden pins approximately one inch square and six inches long driven through the sod into the soil until they are flush with the top of the sod.

Soil for lawn areas will consist of loam stripped and stocked under the contract, loam stripped and stockpiled under previous contracts. It is understood that sufficient loam to complete required work exists within the limits of Scot Park and that the contractor will not be required to bring loam to the job from outside the Park limits without additional compensation.

Lime shall be applied to the sub-surface of lawn areas at the rate of 50 pounds to 1000 square feet. Sub-grade soil shall be loosened and mixed to a depth of 2 to 4 inches and all stones over 2 inches in size, sticks and rubbish removed. No heavy objects except lawn rollers shall be moved over lawn areas after the sub-grade soil has been prepared unless the sub-grade soil is again graded and loosened as specified above before topsoil is spread. After the sub-grade soil has been prepared, topsoil shall be spread evenly thereon and lightly compacted. No topsoil shall be spread in a frozen or muddy condition. Topsoil shall be brought to finish grade. Allowance for settlement shall be made.

Commercial Fertilizer shall be applied to the lawn areas at the rate of 50 pounds to 1000 square feet. Fertilizer may be applied with seed.

Grass seed shall be of last year's crop available and shall be a mixture of the following kinds in the percentage indicated. The mixture shall not contain over 0.05% weed seeds or 3% inert matter.....

Proportion by Weight	Kind of Seed	Purity	Germination
50%	Chewings N.Z. Fescue or Illahee Creeping Fescue	98	85
20%	Kentucky Blue	87	85
30%	Common Ryegrass	90	90

Any soil, manure, peat or similar material which has been brought onto areas other than lawn areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times. Upon completion of planting all excess soil, stones, and debris which has not previously been cleaned up shall be removed from the site or disposed of as directed by the Engineer.

Lawns shall be protected and maintained by watering, mowing and replanting for at least 60 days and as much longer as is necessary to establish a uniform stand of the specified grasses and until acceptance.

#### 2-6 DRIVENWAYS AND PARKING AREAS

This contractor shall build all driveways and parking areas as shown on the plans. Sub-grade shall be prepared to line and grade 8" below finish grade. 8" of bank gravel meeting the Engineer's requirements and having his approval shall be placed graded and rolled to finish elevations and sections. Gravel shall have no stone greater than 4 inches in cross section. Place 1/2 inch of stone dust on top of gravel, mix thoroughly with upper one or two inches of gravel, wet thoroughly and reroll with heavy roller. Furnish and install drain inlets drain piping headwalls and splash pads as detailed on the plans.

#### 2-7 FENCING

This contractor shall furnish and install a six foot high chain link fence where indicated on the site plan. Posts shall be 10'1" on centers. Line posts shall be 2-1/4" H columns, weighing 4.1# per foot. End, corner, and pull posts shall be 3" diameter 5179# per foot. Corner braus shall be 1-5/8" diameter 2.27# per foot and 3/8" round rod trusses with turnbuckles. Top rail shall be 1-5/8" diameter 2.27# per foot. Bottom rail shall be 1-1/2" H beam 2.27# per foot. Fabric shall be 2" mesh - 9 gauge. Gate shall be 10' double swinging, with 3" diameter 5.79# per foot gate posts and 2" diameter gate frame with 3/8" truss rod cross braces. Fabric shall match fence. Gates shall be complete with hinges, locking device and hold backs. Posts shall be set 2'6" in 3'0" deep 12" round 2500# concrete foundation crown top of foundation concrete to shed water.

Mesh shall be barbed at bottom and knuckled over at top and set level with top rail.

All material shall be hot dipped galvanized or heavily zinc coated after fabrication. Steel wire and steel pipe shall be copper bearing complete with all necessary fittings. All materials shall meet or better A.S.T.M. specification and shall be installed in complete accordance with manufacturer's recommendations regarding installation, materials and expansion.

2-8 CITY WATER EXTENSION TO POND

This Contractor shall excavate and backfill a trench from the Chlorinator room to the shore of the pond as shown on the plans. Trench shall be 5'0" deep. In this trench the plumbing contractor under another contract running concurrently with this contract will lay a 6" water main and install a valve and hydrant. This Contractor shall coordinate his work with that of said plumbing contractor and work in conjunction with him to complete the installation under the plumbing contractor's supervision and to meet his requirements.

This Contractor shall construct a 6" concrete splash pad as shown on the drawings in the location of the hydrant.

2-9 CLEANUP

On completion of the work under this contract and prior to acceptance by the Owner, this Contractor shall clean the entire area removing all paper, rubbish, debris, unused materials, etc. to the Engineer's satisfaction.

CONSTRUCTION OF DAM AND BATHING AREA

at

BEMIS POND, SZOT PARK

\*\*\*\*\*

CHICOPEE, MASSACHUSETTS

MAYOR WALTER J. TRYBULSKI

CHICOPEE PARK COMMISSION

ARTHUR D. MAROTTE, CHAIRMAN

ANTHONY J. BEDNARZ

ROLAND L. HENAUULT

WILLIAM T. BLANCHARD

JOHN S. LASKOWSKI

JOSEPH PRESTON, SUPERINTENDENT OF PARKS

\*\*\*\*\*

GORON E. MACNEILL ASSOCIATES, CONSULTING ENGINEERS

JOSEPH C. GRAY, A.I.A., A.I.P., ARCHITECT AND CITY PLANNER

GOLDBERG LEMESSURIER ASSOCIATES

STRUCTURAL ENGINEERS

\*\*\*\*\*

February, 1954

**HAMPDEN COUNTY**  
**APPROVED**

MAR 24 1954

*Thomas J. Sullivan*  
*William F. Hapston*  
*Edgar S. Welch*  
County Commissioners

PART ONE

SECTION A.

Instructions to Bidders  
Proposal Form for General Bidders  
Certificate as to Corporate Bidder  
Affidavit  
Contract

SECTION B.

General Scope of Work

PART TWO

Division I. Dam

Division II. General Site Work

## SECTION A

### INSTRUCTIONS TO BIDDERS

#### 1. TITLE OF PROJECT

DAM AND BATHING AREA, BENIC POND, SZOT PARK, CHICOPEE, MASSACHUSETTS  
Gordon E. MacNeill Associates, Consulting Engineers

#### 2. SCOPE OF BID

The Board of Park Commissioners of the City of Chicopee, Massachusetts, (hereinafter called the "Owner") invites bids for the construction of a dam and bathing area at Benic Pond, Szot Park, Chicopee, Massachusetts

#### 3. SUBMISSION OF GENERAL BIDS

Sealed bids from general bidders will be received at the office of the Board of Park Commissioners, City Hall, Chicopee, Massachusetts

until 7:30 P.M. (E.S.T.) March 9, 1954

and at that place and time will be publicly opened and read.

The bidder shall submit his bid for the project in a sealed envelope bearing on the outside the name of the bidder, his address, and the title of the project for which the bid is submitted. (If forwarded by mail the sealed envelope containing the bid, and marked as directed above, must be enclosed in another envelope addressed to the Board of Park Commissioners at City Hall, Chicopee, Massachusetts, preferably by registered mail.)

#### 4. BID PREPARATION

Each general bidder shall make an initial deposit by registered check payable to the City of Chicopee, or cash, with the Board of Park Commissioners, City Hall, Chicopee, Massachusetts or with Gordon E. MacNeill Associates, Consulting Engineers, 561 Boylston Street, Boston, Massachusetts in the amount of twenty five (\$25.00) to receive one complete set of drawings and specifications for the project. All copies of drawings, specifications and addenda are the property of the consulting engineer and shall be returned within ten (10) days after the opening of bids. The initial deposit will be refunded only if the documents are returned in good condition.

Bidders shall thoroughly familiarize themselves with the drawings and specifications and shall visit the project site and carefully examine it and familiarize themselves with existing conditions. Existing elevations, locations, and conditions mentioned in the specifications or indicated on the drawings are given for general

information only and are not guaranteed by the owner. The bidder will be required to meet conditions as they exist and complete work indicated on drawings or called for in specifications at his own expense and without extra cost to the owner.

## 5. BONDS

The following bonds will be required:

- A. Proposal Guaranty for General Bid. A proposal guaranty in the form of cash, a certified check, or a bid bond, in the amount of three per cent (3%) of the amount of each bid. This guaranty shall be payable to the City of Chicopee and shall be submitted by each general bidder with each of his bids.

This guaranty will be returned to all but the three lowest responsible and eligible bidders within ten days after the opening of bids, and to the remainder after the contract has been executed or, in case of the rejection of all bids, within thirty (30) days after the opening of bids. Should any bidder on the proposed work to whom an award is made fail to enter into the contract therefor within ten (10) days after notice of award has been mailed or delivered to him, the amount so received from such bidder through his cash or certified check or bid bond shall become and be the property of the City of Chicopee as liquidated damages.

- B. Performance Bond for General Bid. A performance bond in the amount of one hundred per cent (100%) of the contract price, with a surety company approved by the Owner, will be required of the successful bidder. The cost of this bond is to be paid by the bidder.

- H. Bidders are referred to the General Conditions for supplementary data on bonds and insurance.

## 6. BIDDING PROCEDURE

Bidding procedure shall be in accordance with the laws (Ter.Ed.) Chapter 14D, Sections 44A through 44D, both inclusive.

- A. The bidding procedure shall be as follows:

- (a) Bids from general contractors shall be for the complete project as specified and the general contractor shall be selected on the basis of such bid.

## 7. ADDENDA

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the plans, specifications or other proposed contract documents, he may submit to the Consulting Engineer a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any



interpretation of, or addition to, the proposed documents will be made only by Addendum duly issued and a copy of such Addendum will be mailed or delivered to each person receiving a set of documents. The engineer will not be responsible for any other explanation or interpretation or additions. All Addenda to bidders are to be incorporated in the proposal and will become part of the contract documents.

#### 9. BID FORMS

Bidders are required to make their proposals in their pertinent form of the Proposal Form for General Bidders, copies of which are included in this Section.

The proposal must bear the written signature of the bidder. If the bidder is an individual doing business under a name other than his own name, the proposal must so state, giving the address of the individual. If the bidder is a partnership, the proposal must so state, setting forth the names and addresses of all partners and must be signed by a partner designated as such. If the bidder is a corporation, the proposal must bear the seal of the corporation and must be signed by a duly authorized officer or agent of such corporation, and the Certificate attached to the Form of Proposal must be executed and included.

Any bid which fails to name a price, both in words and in figures, per unit for each and every item wherein quantities are given, may be held to be informal and may be rejected, and in case of any discrepancy between the price written in words and that given in figures, the price written in words will be considered as bid. No alterations, erasures, or interlineations shall be made in the bid. Conditional bids will not be accepted.

The price or prices bid for the item or several items of the work shall include and cover the cost of furnishing all materials, labor and services necessary for the performance of all work set forth, described and shown in the proposal, specifications and on the drawings for the work.

#### 10. AWARD OF GENERAL CONTRACT

The general contract shall be awarded on the basis of competitive bids to the lowest responsible and eligible bidder within thirty (30) days of the date when the bids are opened. The Owner, as the awarding authority, reserves the right to reject any or all bids if it be in the public interest to do so.

The Owner may require the lowest bidder, and such other bidders as he may determine, to file with him a statement, sworn to by the bidder, setting forth the financial condition, present plant and equipment, working organization and prior experience of the bidder, and such other pertinent information as the Owner may deem reasonably necessary to determine the qualifications of the bidder. Such statements shall be returned to all except the successful bidder upon request. Such statement shall be for the use and information solely of the Owner.

The person or persons to whom the contract may be awarded will be required to execute the contract within ten (10) days from the date of the service of a notice to the effect that the contract has been awarded.

11. FORM OF CONTRACT

It is the intent that the contract be let on the basis of a stipulated sum.

Date of Completion of the contract for this project shall be July 1, 1954.

The Contractor will be required to complete the entire work to the satisfaction of the Owner, and in strict accordance with the plans, specifications and the contract. No compensation beyond the amount payable for the several classes of work and materials hereinafter enumerated which shall be actually performed and furnished at the prices therefor hereinafter stated, shall be due or payable for the entire work and materials.

The Contractor shall comply with the applicable laws of the Commonwealth of Massachusetts, by-laws of the City of Chicopee, Mass., and regulations of any other appropriate authority.

PROPOSAL FORM FOR GENERAL BIDDING

DAM AND BATHING AREA, SHOT PARK, BIRMINGHAM, CHICOPEE,

to: Board of Park Commissioners  
City Hall  
Chicopee, Massachusetts

(a) The undersigned proposes to furnish all the labor, materials and services required for the construction of the Dam and Bathing Area at Davis Pond, Shot Park, Chicopee, Massachusetts, in accordance with the accompanying specifications and drawings prepared by Gordon E. MacMillan Associates, Consulting Engineers, 561 Boylston Street, Boston, Massachusetts, for the sum specified below, subject to additions and deductions according to the specifications and in all respects according to the terms thereof.

(b) The undersigned agrees that if within thirty (30) days from the day named for delivering the proposal to the awarding authority, notice that this proposal will be accepted by the Owner shall be mailed to him at the business address given below, or shall be delivered to him, he will, within ten days thereafter, deliver to the Owner where directed a contract properly executed in duplicate (or otherwise) in the forms annexed with such changes thereto as shall have been made by the Owner prior to the time named for delivery of this proposal, together with a bond of a surety company satisfactory to the awarding authority in the sum of one hundred (100) or more of the contract price, the premium for which is to be paid by the contractor and is included in the contract price.

(c) The proposed contract sum is \_\_\_\_\_  
(dollars) (\$ \_\_\_\_\_).

(d) The undersigned further agrees that the certified check or bid bond or cash left with the Board of Park Commissioners shall become the property of the City of Chicopee, Mass., as liquidated damages, if, after an award is made to him, he shall fail to enter into a contract therefor within ten (10) days after notice of said award has been mailed or delivered to him.

The undersigned agrees to commence operations on the dam and bathing area within ten (10) days after being awarded a contract and to prosecute the work to completion, subject to extension of time due to delay caused by a strike or boycott for which the contractor is in no way responsible and which the contractor cannot reasonably avoid, on or before July 1, 1954.

In submitting this bid it is understood that the Owner reserve the right to reject any or all bids of the general bidder and to waive any informalities in bidding if it be in the public interest to do so. It is also agreed that this bid may not be withdrawn prior to thirty (30) days from the date of the opening of the bids without the consent of the Owner.

The undersigned states that he has received Addenda numbered \_\_\_\_\_.

Bidder:

By:

Business Address:

Date:

The bidder is a \_\_\_\_\_  
Individual-Partnership-Corporation

The full names and addresses of all persons interested in this proposal, as principals, are as follows:

Individual Owner:

State full name and address of Owner. If business is carried on in any other name than that of the Owner, state such name and address:

Partnership:

State full name and address of all partners.

Corporation:

Corporation is incorporated in the State of

President is

Treasurer is

Place of business is

Note: This proposal must bear the written signature of the bidder.

If the bidder is an individual doing business under a name other than his own name, the proposal must so state giving the address of the individual.

If the bidder is a partnership, the proposal must state, setting forth the names and addresses of all partners and must be signed by a partner designated as such.

If the bidder is a corporation, the proposal must bear the seal of the corporation and must be signed by a duly authorized officer or agent of such corporation.

CERTIFICATE AS TO CORPORATE BIDDER

I, \_\_\_\_\_, certify that I  
am the \_\_\_\_\_ of the corporation named  
as a Bidder in the within Bid Form; that \_\_\_\_\_  
\_\_\_\_\_, who signed said Bid Form on behalf of the  
Bidder was then \_\_\_\_\_ of said corporation; that I  
know his signature; that his signature thereon is genuine and that said  
Bid Form was duly signed, sealed and executed for and in behalf of said  
corporation by authority of its governing body.

(CORPORATE USE)

\_\_\_\_\_  
Secretary - Clerk

Dated: \_\_\_\_\_

AFFIDAVIT

State of \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_, being first duly sworn, deposed and says:

That he is \_\_\_\_\_

(insert in line above your position as partner or officer and name of partnership or corporation), the party making the foregoing proposal or bid, that such bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed directly or indirectly with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or that of any other bidder, or to secure any advantage against the City of Chicago or any person interested in the proposed contract; and that all statements contained in said proposal or bid are true.

(Name of bidder if the bidder is an individual)

(Name of partner if the bidder is a partnership)

(Name of officer if the bidder is a corporation)

Subscribed and sworn to this

day of \_\_\_\_\_

Notary Public

My Commission expires \_\_\_\_\_

CITY OF CHICOPEE, MASS.  
BOARD OF PARK COMMISSIONERS

CONTRACT

for

CONSTRUCTION OF A DAM AND BATHING AREA AT BELKIS POND

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_  
A.D. 1954, by and between the City of  
Chicopee, Massachusetts, through its Board of Park Commissioners,  
duly authorized in the premises and acting solely for the City of  
Chicopee and without personal liability, either individually or col-  
lectively, party of the first part, and  
with legal address and principal place of business at \_\_\_\_\_  
hereinafter designated  
as the Contractor, party of the second part:

WITNESSETH: That the parties to these presents, each in considera-  
tion of the undertakings, promises and agreements on the part of the other  
herein contained, have undertaken, promised and agreed, and do hereby under-  
take, promise and agree, the party of the first part for himself and for his  
successors and assigns, and the party of the second part for themselves and  
for their heirs, executors, administrators, successors and assigns, as  
follows:

Article I. Wherever the words defined in this article, or pre-  
sented in their word, occur in this contract, and the  
certifications hereto attached, they shall have the meanings  
given.

Definitions

The word "Commission" shall mean the Board of Park Commissioners,  
of the City of Chicopee, Mass., or any agent or officer duly  
authorized to act in its place in the execution of the work  
required by this contract.



The word "Engineer" shall mean any person designated by the Board of Park Commissioners of the City of Chicago, acting directly or through properly authorized agent, such agents acting within the scope of the particular duties entrusted to them.

The word "Contractor" shall mean the party of the second part, above designated, entering into this contract for the performance of the work required by it and the legal representatives of said party, or the agent appointed to act for said party in the performance of the work.

The word "Contract" shall mean, collectively, all of the covenants, terms and stipulations in these articles of agreement, and in the supplementary documents hereto attached which constitute essential parts of the agreement, and are hereby made such parts thereof, to wit:

Advertisement  
Instructions to Bidders  
Proposal Forms  
Contract  
Specifications  
Contract Drawings

The word "Specifications" shall mean collectively all of the terms and stipulations contained in the general and detailed specifications appended to this agreement.

The words "Contract Drawings" shall mean the drawings hereto attached, together with such supplementary drawings as may be issued or approved by the Engineer from time to time as herein elsewhere provided.

Wherever in the specifications or in the contract drawings the words directed, required, permitted, ordered, instructed, designated, prescribed, considered necessary, or words of like import are used, it shall be understood that the direction, requirement, permission, order, instruction, designation, prescription or decision of the Engineer is intended; and likewise the words approved, acceptable, satisfactory, or words of like import, shall mean approved by, or acceptable or satisfactory to the Engineer, unless another meaning is plainly intended.

Article II. The contractor shall do all the work and furnish all the materials, tools, labor and equipment necessary, proper and incidental to the construction of the dam and bathing area and required by the contract, in the manner, within the time, and for the consideration herein stipulated and agreed upon.

Work to be done.

Article III. All the work under this contract shall be done to the satisfaction of the Engineer, who shall in all cases determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for hereunder; and shall decide all questions which may arise as to measurement of quantities and the full intent of the conditions of this contract on the part....

Engineer to decide.

of the Contractor, and his determination and decision thereon shall be final and conclusive and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

Article IV. The work during its progress and upon its completion must conform with the Contract Drawings and Specifications, and with other directions of the Engineer, as given from time to time during the progress of the work, under the terms of this contract; in no case shall any work in excess of the requirements of the drawings be paid for unless authorized in writing by the Engineer or his agents especially authorized thereto.

Work to be done  
in accordance  
with drawings  
and specifica-  
tions

Article V. The Contractor shall commence the work after the contract has been executed by the City and upon notice from the Board of Park Commissioners or Engineer signifying that the work must be started.

Time and manner  
of doing work.

The Contractor shall prosecute the work as directed by the Engineer until completion.

The Date of Completion shall be the date of the final estimate prepared under the conditions herein specified.

The Contractor shall commence the work at such points and shall thereafter continue at such points and in such order or precedence as the Engineer may approve.

Article VI. If the Contractor is obstructed or delayed in the prosecution or completion of the work by any damage that may happen thereto by the unusual action of the elements, or by the abandonment of the work by the Employees in a general strike, the Contractor shall have no claim for damage for any such cause or delay, but he shall in such case be entitled to such extension of time specified herein for the completion of the work as the Engineer shall in writing certify to be just and proper; provided, however, that claim for such extension of time is made by the Contractor in writing within one (1) month from the time when such alleged cause for delay shall occur.

~~Extension~~ of time

Article VII. The Contract Drawings and Specifications are intended to be explanatory of each other, but should any discrepancy appear or any misunderstanding arise as to the import of anything contained in either, the explanation of the Engineer shall, in all cases, be final and binding upon the Contractor. Any corrections of errors or omissions in the Drawings and Specifications may be made by the Engineer when such correction is necessary for the proper fulfillment of their intention as determined by him.

Drawings and  
Specifications  
mutually  
explanatory

Article VIII. This contract and the specifications herein contained and the drawings herein referred to, may be changed from time to time as may be agreed in writing between the parties hereto, in a manner not materially affecting the substance thereof nor materially increasing the amount to be paid, in order to carry out and complete more fully and perfectly the work herein agreed to be done and performed.

Changes

Article IX. In case work other than that specified shall be found necessary, the Contractor shall perform the whole or such portion of such work as the Engineer may require, and agrees to accept as full compensation for such extra work the actual and necessary net cost of the work as determined by the Engineer, plus fifteen (15) per cent, of such cost. Such actual net cost shall cover all labor and materials necessary for the performance of the extra work, including any extraordinary expenses incurred directly on account thereof, the wages of foreman and the expense attached to the Contractor's liability insurance covering the labor so employed. In computing such net cost, however, no interest, rent or depreciation of plant, nor services of a general superintendent or administrative force shall be included; the allowance of fifteen (15) per cent shall include all such expense for superintendence, administration, interest, rent depreciation, general expenses of plant and contingencies; and shall include all profit. The Contractor shall, before the tenth day of the month succeeding that in which any extra work shall have been performed, file with the Engineer an account giving the itemized cost of such extra work, and shall give the Engineer access to all accounts, bills and vouchers relating thereto. In case the Contractor fails to file, at the time above mentioned, such account for extra work, he shall have no claim for compensation for the same against the Commission, over and above the allowance certified by the Engineer. No extra work will be paid for unless ordered in writing by the Engineer.

Article X If the Contractor claims compensation for any damage alleged to have been sustained by reason of any act or omission of the Commission or any of its agents, he shall, within one (1) week after the sustaining of such damage, make a written statement to the Commission of the nature of the damage sustained, and shall, on or before the fifteenth (15th) day of the month succeeding that in which any such damage shall have been sustained, file with the Engineer an itemized statement of the details and amounts of such damage, and unless such statements shall be made as so required, his claim for compensation shall be forfeited and invalid, and he shall not be entitled to payment for any damage.

Contractor's  
claims for  
damage.

Article XI. The Contractor shall keep the work under his personal control, and shall not assign, transfer, convey, sublet or otherwise dispose of this contract, or his right, title or interest in or to the same or any part thereof, without the previous consent in writing of the Commission, and he shall not assign, by Power of Attorney or otherwise, any of the moneys to become due and payable under this contract, unless by and with the like consent of the Commission; provided that nothing herein contained shall be construed or hinder, prevent, or affect an assignment by the Contractor for the benefit of his creditors, made pursuant to existing statutes of the Commonwealth of Massachusetts.

Not to sublet  
or assign.

Article XII. The Contractor shall give his personal attention constantly to the faithful prosecution of the work, and shall be present, either in person or by a duly authorized representative, on the site of the work, continually during its progress; such representative shall have authority to receive and to act without delay upon all instructions of the Engineer or his assistants in the prosecution of the work in conformity with this contract.

Representative  
on work.

Article XIII. The Commission and the Engineer and other agents and employees of the Commission may for any purpose, and its other contractors may for all purposes required by their contract, enter upon the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor. Any differences or conflicts which may arise between the Contractor and other contractors or agents of the Commission in regard to their work shall be adjusted and determined by the Engineer.

Access to work  
and to places  
of manufacture.

Furthermore, the Commission and the Engineer and their assistants and agents shall, at all times, have access to all places where materials are being prepared for use under this contract, and shall have full facilities for unrestricted inspection of such materials.

Article XIV. The contractor shall provide the services and equipment of competent personnel to provide lines and grades for the work and shall be responsible for their accuracy.

Lines and grades.

Article XV. Whenever the Contractor is not present on any part of the work where it may be desired to give directions, orders may be given by the Engineer and shall be received and obeyed by the Superintendent or foreman who may have charge of the particular work upon which the orders are given.

Orders

Article XVI. The Contractor shall employ only competent and skillful men to do the work, and whenever the Engineer shall notify the Contractor, in writing, that any man on the work is, in his opinion, incompetent, unfaithful or disorderly, or in any other way unsatisfactory, such man shall be discharged from the work and not again employed on it except with the consent of the Engineer

Competent help  
to be employed.

Article XVII. The Contractor shall keep himself fully informed of all laws, ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency shall be discovered in this contract, or in the drawings or specifications herein referred to, in relation to any such law, ordinance, regulation, order, or decree, he shall forthwith report the same in writing to the Engineer. He shall at all times himself observe and comply with, and shall cause all his agents and employees to observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees; and shall protect and indemnify the Commission and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or by his employees.

Regulations  
Laws and  
Ordinances

Article XVIII. Nothing in the contract shall be considered as vesting in the Contractor any right of property in materials used, after they shall have been attached or affixed to the work or soil, nor in materials which have been estimated for partial payment, but all such materials shall, upon being so attached or affixed, or estimated, become the property of the Commission.

Right of property  
in materials

Article XIX. Inspection of the work shall not relieve the Contractor from any of his obligations to fulfill the contract as herein described, and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work, or selected therefor, shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith move such material from the vicinity of the work. If the Contractor shall fail to remove or replace any defective or damaged materials or work after reasonable notice, the Engineer may cause such materials or work to be removed or replaced, and the expense thereof shall be borne by the Contractor.

Defective work

Article XX. If the work to be done under this contract shall be abandoned, or if this contract shall be sublet or the contract or any claim thereunder shall be assigned by the Contractor otherwise than as heretofore specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the Commission, that the conditions herein as to the rate of progress are not fulfilled or that the work, or any part thereof, is unnecessarily or unreasonably delayed, or the Contractor is violating any of the provisions of this contract, that Commission may notify the Contractor to discontinue all work, or any part thereof, and thereupon the Contractor shall discontinue such work or such part thereof as the Commission may designate, and the Commission may thereupon, by contract or otherwise, as it may determine, complete the work, or such part thereof, and charge the expense thereof to the Contractor, and may take possession of and use therein such materials, animals, machinery, equipment, implements and tools of every description as may be found upon the site of said work. The expenses so charged shall be deducted and paid by the Commission out of any or any part of money then due or to become due the Contractor under this contract, or any part thereof; and in case such expense is less than the sum which would have been payable under this contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expense shall exceed that latter sum, the Contractor, or in case of his default, his surety, shall pay the amount of such excess to the City of Chicopee.

Conditions  
under which the  
Commission may  
complete the work

Article XXI. The Contractor shall take all responsibility of the work and shall take precautions for preventing injuries to persons and property in or about the work; shall bear all losses resulting to him on account of the nature of the land in or on which the work is done if different from what was estimated or expected, or on account of the weather, elements or other causes; shall cover and protect the work from damage by flood or front action, and all injury to the same before the completion of the contract shall be made good by him; and he shall assume the defense of and indemnify and save harmless the Commission from all claims, likewise each member of the Commission and its officers and agents, relating to labor or materials furnished for the work; to inventions, patents and patent rights used in the work or in doing the work; to injuries to any person or corporation received or sustained by any act of the Contractor or his employees in doing the work, or in consequence of any improper materials, implements or labor used therein; and to any act, omission or neglect of the Contractor and his employees therein.

Responsibility  
Of Contractors  
Indemnity etc.

Article XXIII. The Commission may keep any moneys which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefor, to the payment of any expenses, losses or damages incurred by the Commission and determined as herein provided, and may retain until all claims are settled so much of the moneys as the Commission shall be of the opinion will be required to settle all claims of the nature specified in Article XXI against the Commission and its officers and agents, and all claims for labor or materials for the work, notice of which, signed and sworn to be the claimants, shall have been filed in the office of the Commission. The Commission may also with the written consent of the Contractor, use any money retained, due or to become due under this contract, for the purpose of paying for labor or materials for the work.

Money may be retained.

Article XXIII. The Commission shall pay and the Contractor shall accept as full compensation for everything furnished and done by the Contractor under this contract, and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all rights of every description connected with the work, and for all expenses incurred by or in the consequence of the suspension or discontinuance of the work as herein specified, and for well and faithfully completing the work, and the whole thereof, as herein provided, the sum of

Price of work.

Article XXIV. In order to assist the Contractor to prosecute the work advantageously, the Engineer shall, from time to time during the active progress of the work and generally once each month, make in writing an estimate, such as in his opinion shall be just and fair, of the amount of work done to the time of such estimate and the value thereof in accordance with the terms of the contract.

Partial estimates and payments.

Upon such partial estimate being made and certified in writing to the Commission, the Commission shall retain ten (10) per cent, of the total estimated valuation as part security for the fulfillment of the contract on the part of the Contractor, and shall pay to the Contractor prior to the fifteenth day of the month after the date of the estimate the balance not retained as aforesaid after deducting therefrom all previous payments and all amounts to be kept or retained under the provisions of this contract or as may be authorized or required by any law of the Commonwealth of Massachusetts.

Payments may at any time be withheld if the work is not proceeding in accordance with the contract, and at the option of the Commission estimates may be made more frequently and a smaller amount may be retained than as aforesaid.

Article XXV. Whenever in the opinion of the Engineer the Contractor shall have completely performed the contract on his part, the Engineer shall so certify in writing to the Commission and shall submit a final estimate of the total amount of work done by the Contractor, and of the value of such work under and according to the terms of this contract. Upon the expiration of thirty (30) days after the date of acceptance of the work by the Commission, the Commission shall pay to the Contractor the entire sum so found to be due hereunder, after deducting therefrom all previous and all amounts to be kept or retained under the provisions of this contract.

Final estimate  
and payment

All prior partial estimates and payments shall be subject to correction in the final estimate and payment; the final estimate and the measurements upon which it is based may be made without notice thereof to the Contractor.

Article XXVI. Neither the acceptance of the Commission or its Engineer, or any of its employees, nor any order, measurement or certificate by the Engineer, nor any order by the Commission for payment of money, nor any payment for, nor acceptance of the whole or any part of the work by the Engineer or the Commission, nor any extension of time, nor any possession taken by the Commission or its employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the Commission, or of any right to damages herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach. All remedies provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided.

Waivers

Article XXVII. No person, firm or corporation, other than the signer of this contract as Contractor, now has any interest hereunder, and no claim shall be made or be valid, and neither the Commission nor any of its agents shall be liable for or be held to pay any money, except as provided in Articles VIII, IX, X, XXIII, XXIV, and XXV. The acceptance by the Contractor of the final payment aforesaid shall operate as, and shall be, a release to the Commission and its agents, from all claim and liability to the Contractor for anything done or furnished for, or relating to, the work or for any act or neglect of the commission or of any person relating to or affecting the work.

Final payment  
to terminate  
liability of  
commission.

Article XXVIII. Public Employee May Select Lodging:  
Every employee in public work shall lodge, board and trade where and with whom he elects; and no person or his agents or employees under contract with the Commonwealth, a county, city or town, or with a department, board commission or officer acting therefor, for the doing of public work shall directly or indirectly require, as a condition of employment therein, that the employee shall lodge, board or trade at a particular place or with a particular person, and all as provided in Chapter 149, Section 25, of the General Laws, as amended.



which said Chapter and Section are made a part hereof as if at length set forth herein.

Article XXXIII. Performance Bond: The Contractor shall furnish to the City bond of security, in an amount equal in full to the sum payable of all the terms and conditions of the CONTRACT, and the payment of all obligations arising thereunder, and as required by the Charter of the City of Chicopee as set forth in the Acts of 1897, Chapter 239, Section 88, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein, and the premium for such bond shall be paid by the Contractor.

The Performance and Labor and Material Bonds may be made up in one instrument.

Article XXXIV. In doing the contemplated work under this contract, preference shall be given to citizens of Chicopee.

Article XXXV. Both the address given in the bid or proposal upon which this contract is founded and the Contractor's office at or near the site of the work are hereby designated as places to either of which notices, letters and other communications to the Contractor shall be mailed or delivered. The delivering at either of the above named places, or depositing in a postpaid wrapper directed to the first named place, in any Post Office box regularly maintained by the Post Office, of any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor and the date of said service shall be the date of such delivery or mailing. The first named address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the Commission. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

Article XXIX. Preference to Veterans and Citizens: In the employment of mechanics, teamsters, chauffeurs and laborers in the construction of public works by the Commonwealth, or by a county, town or district, or by persons contracting or sub-contracting for such works, preference shall first be given to citizens of the Commonwealth who have served in the Army or Navy of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the Commonwealth generally, and, if they cannot be obtained in sufficient numbers, then to citizens of the United States, and all as required by the General Laws, Chapter 149, Section 26, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein.

Article XXX. Hours and Days of Employment: With regard to the persons in his employ, the Contractor shall comply with the provisions of General Laws, Chapter 149, Section 34, as amended, which reads as follows:

"Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen or mechanics, foremen or inspectors, to which the Commonwealth or any county or any town, subject to Section 30 is a party, shall contain a stipulation that no laborers, workmen, or mechanic, foreman or inspector, working within the Commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty eight hours in any one week, or more than six days in any one week, except in cases of emergency, or in case any town subject to Section 31 is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided that in contracts entered into the Department of Public Works for the construction or reconstruction of highways there maybe inserted in said stipulations a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workmen, mechanics foremen and inspectors, for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the Commissioner of Labor and Industries public necessity so requires. Every such contract not containing the aforesaid shall be null and void."

ArticleXXXI. Workmen's Compensation: The Contractor shall before commencing performance of the Contract herein entered into, provide by insurance for the payment of compensation and the furnishing of other benefits under General Laws, Chapter 149, Section 34A, as amended, to all persons being employed under the Contract and the Contractor shall continue such insurance in full force and effect during the term of the within contract, as required by General Laws, Chapter 149, Section 34A, as amended, which said Chapter and Section are made a part hereof as if at length set forth herein.

IN WITNESS WHEREOF, on the day and year first above written, the City of Chicopee has caused its corporate seal to be hereto affixed, and these presents to be signed in its name and behalf by its BOARD OF PARK COMMISSIONERS, and

hereunto set their individual hands and seals, this being one of four counter-part originals of the within agreement, all being executed as aforesaid, and constituting together one and the same agreement.

CITY OF CHICOPEE

Approved:

MAYOR

Approved as to form

City Solicitor

BOARD OF PARK COMMISSIONERS

COMMONWEALTH OF MASSACHUSETTS

Hampden, ss.

Chicopee, \_\_\_\_\_ A.D. 1954

Then personally appeared above named \_\_\_\_\_, known  
to me, and made oath that he, the said

\_\_\_\_\_ and the duly appointed and  
qualified members of the BOARD OF PARK COMMISSIONERS of the City of  
Chicopee, and that each of them subscribed his name to the foregoing  
instrument, in execution of such instrument, in accordance with the  
authority of law conferred upon them, before me,

Notary Public \_\_\_\_\_ (SEAL)

Commission expires \_\_\_\_\_

COMMONWEALTH OF MASSACHUSETTS

, ss.

\_\_\_\_\_, 1954

Then personally appeared the above named

\_\_\_\_\_ known to me to be the  
described in and who executed the foregoing instrument, before me,

Notary Public \_\_\_\_\_ (seal)

Commission Expires \_\_\_\_\_

I, the undersigned, the duly authorized and acting legal representative of the City of Chicopee, Massachusetts, do hereby certify as follows:

I have examined the foregoing contract and surety bond and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representative; that said representative has full power and authority to execute agreements on behalf of the respective parties named thereon; and that the foregoing agreement constitutes valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions and provision thereof.

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(Title)

## SECTION B

### GENERAL SCOPE OF WORK

#### 1. SITE

The Contractor shall accept the premises in their present condition.

#### 2. GENERAL

Certain work in connection with the construction of the bathing area has been completed. This work has altered the existing contour as indicated on plans. Work outside the scope of this contract will be carried on simultaneously with the work under this contract. The contractor shall cooperate with other contractors and City employees to coordinate his work with theirs to ensure completion of all work in the area without unnecessary delay.

The work to be done under this contract includes all labor, materials and equipment to complete all work required for the construction of the dam and bathing area and associated facilities to complete the work shown in the drawings in strict accordance with the Drawings and Specifications, together with any Addenda which may be issued during the bidding period.

The work includes handling of sub-surface conditions which may be encountered at no additional cost to the owner.

The work also will include handling of sub-surface conditions which may be encountered at no additional cost to the owner.

The work also will include later instructions, modifications to, additions or deletions from the contract as agreed by the Owner and the Contractor during the construction period in accordance with procedures described in these specifications.

Items of work not included in this contract but shown on the plans are noted on the drawings.

#### 3. TESTS

The General Contractor shall assume the overall responsibility with respect to the Owner, for the performance of all tests included in the Specifications, and for the performance and costs of all tests, for which responsibility is not specifically assigned to others, required to establish the specified characteristics of all materials.

#### 4. BONDS

Bonds will be required as called for in the Instructions to Bidders.

5. PERMITS

All building permits, certificates, and licenses shall be paid for by the Contractor.

6. TEMPORARY TOILETS

The Contractor shall provide and maintain temporary sanitary toilets adequate for the use of all employees and in conformity with the requirements of pertinent Codes and Regulations.

7. TEMPORARY WATER SUPPLY

The Contractor shall provide and pay for all water required for the construction work and shall furnish all necessary connections, equipment and labor for installing and maintaining the same, including that required for fire protection during the project work.

8. TEMPORARY LIGHT AND POWER

The Contractor shall provide and pay for all electric energy for light and power as required to complete the work of the Contract, including the labor and materials for temporary wiring, fixtures, transformers and other equipment.

9. TEMPORARY HEAT

The Contractor shall provide and pay for all special equipment and for the fuel and service for temporary heating as required for the proper protection and drying of all work. The method of providing temporary heating shall be subject to the approval of the Engineer.

10. STORAGE OF OILS AND GASOLINE

The storage on the project site of any and all oils, gasoline, or other combustibles, shall be subject to the requirements of pertinent authorities having jurisdiction.

11. WINTER CONDITIONS

The General Contractor shall assume responsibility with respect to the Owner for the erection and maintenance in operation of all structures and facilities required for the protection and continuance of work during winter conditions.

12. PROTECTION

Article 12, Protection of Work and Property, of the General Conditions, shall be and is supplemented as follows:

- a. General: The recommendations of the Manual of Accident Prevention in Construction, latest edition, published by the Associated General Contractors of America, are hereby made a part of this specification to the extent that such recommendations are not in contravention of applicable laws.

- b. Fire Protection: The Contractor shall provide and maintain in good working order under all conditions, suitable and adequate fire protection equipment and services, approved by the Clerk of the Works.
- c. Watchman: The Contractor shall maintain adequate watchman services for the duration of the project and shall be responsible, with respect to the Owner, for all materials and equipment on the site. He shall make good, at his own expense, all damage or loss to the structures.

13. ENGINEER

The Contractor shall employ, within the terms of his contract, a qualified engineer, who shall lay out the site improvements, establish grades and levels and a permanent bench mark, and do the usual engineering works as required, including levelling and chocking.

14. INTENT OF DOCUMENTS

It is the intent that all materials shall be furnished and all work accomplished in strict accordance with the grades of materials, standards of workmanship, and Standard Specifications listed or mentioned in the documents of the contract. Materials shall be free from defects impairing strength, durability or appearance.

The mention of any method of installation, erection, fabrication, or workmanship shall not operate to make the Contractor an agent, but shall be for the sole purpose of establishing a standard of quality.

15. SPECIFICATION ARRANGEMENT

The separation of the specifications into Divisions is for convenience of reference only and is not intended to limit or prescribe contracts between the Contractor and Sub-contractor.

16. GUARANTEE-WARRANTY

The Contractor shall guarantee all work as called for in the Divisions of this specification, whether performed by himself or by his subcontractors, for one year from the date of substantial completion.

The phrase "one year from date of substantial completion" shall be interpreted to mean one year from the date of final acceptance of the entire project by the Owner.



# 17. SCHEDULE OF MINIMUM WAGES

The following minimum hourly wage rates have been established by the Commissioner of Labor and Industries in accordance with Chapter 149 and 461 of the General Laws of the Commonwealth of Massachusetts. They shall be kept posted in a conspicuous place through the entire time work is in progress.

OCCUPATIONS	RATE PER HOUR
Crane Operator	2.65
Power Shovel Operator	2.65
Bulldozer Operator	2.15
Compressor Operator:	
220 cu.ft. or less	1.75
Over 220 cu.ft.	2.15
Jack Hammer Operator	1.52-1/2
Roller Operator	2.15
Pumpman	2.15
Cement Finisher	2.97-1/2
Stone Mason	2.57-1/2
Mason Tender	1.52-1/2
Carpenter	2.42-1/2
Pile Driver & Cofferdam	
Builder	2.75
Iron Worker	3.05-1/2
Blaster	1.65
Truck Driver	1.89-1/2
Asphalt Raker	1.52-1/2
Curb Setter	2.27-1/2
Common Laborer	1.52-1/2
Water Boy	.75
Electrician	2.73-1/2
Operator of 3 axle equip.	1.55

In conformity with the provisions of the Labor Laws of the Commonwealth of Massachusetts, the minimum wages for a day's work paid to craftsmen, teamsters, mechanics and laborers shall not be less than those established by the above schedule which has been prepared by the Department of Labor & Industries, and which is included in the proposed Contract documents. The Owner and/or Architect assume no responsibility for the accuracy of the rates set forth in this schedule, and no claim for additional compensation will be considered because of any inaccuracy in the rates set forth herein.

## DIVISION I

### DAM

#### 1-1 GENERAL

The General Conditions of the General Contract Specifications apply to all work done under this contract and are hereby made a part of this specification.

#### 1-2 SCOPE

The work to be done under this division of the Specifications includes the furnishing of all equipment, material and labor for the preparation of the foundation to the final removing all silt and unreliable material to provide a proper base of suitable material, the construction of the reinforced concrete frame, the construction of the earth dam from material on the site, the construction of two reinforced spillway channels, the installation of chlorination lines, heads, etc. The construction of the gravel drive across the top of dam including bridges across spillway channels.

#### 1-3 EXISTING CONDITIONS

Silt from the pond bottom including the area of the proposed dam has been removed during the past year. However, since the pond has again been flooded, care in draining the pond must be exercised to prevent the wash of silt from above the dam location into the dam foundation area and over the new sand bottom of the bathing area. The pond shall be drained through the new 16" outlet and valve in the existing dam. This contractor shall remove any and all silt washed into the area to the Engineer's satisfaction before starting construction of the dam.

A section of flume foundation 15' long is now in place and shall be extended as shown on the plans.

The Owner will deliver at the site all reinforcing steel required for the construction of the main Flume and Spillways. This contractor shall accept delivery of the steel and install same in accordance with the drawings. Past experience indicates that the pond level may be sufficiently lowered to allow construction of the flume. The flow of water may then be diverted through the flume while the dam construction is completed.

#### 1-4 PREPARATION OF BASE FOR DAM

The Contractor shall remove all silt, loam and unsuitable material from foundation and locate this material as directed by the Engineer. No logs indicated suitable material approximately three (3) feet below original bed of the pond. The dam shall be constructed on an undisturbed natural base.

#### 1-5 CONCRETE PLUMB

##### A. Materials:

- a. Portland cement shall conform to ASTM Standard Specifications for Portland Cement, "C-150-45 Type I.
- b. Aggregates for concrete shall conform to ASTM "Standard Specifications for Concrete Aggregates" C-33-49 or light weight aggregates C-130-42.
- c. Water shall be clean, and free from injurious amounts of oils, acids, alkalies, organic materials, or other deleterious substances.
- d. Metal reinforcement shall be deformed bars, conforming to one of the ASTM "Standard Specifications for Billet-Steel, Rail-Steel, or Axle Steel Bars, or Cold-Drawn Steel Wire, or Welded Steel Mesh Fabric for Concrete Reinforcement" Numbers A-19-46, A-40-46, A-60-46, A-80-46, A-105-46.
- e. Metal accessories, including spacers, chairs, ties, and other devices necessary for properly assembling, placing, spacing and supporting all reinforcement in place shall be provided. All chairs in contact with forms shall be hot-dip galvanized with rounded legs.

##### B. Testing and Inspection of Materials:

Tests of concrete and materials shall be made under direction of the Engineer who shall have access to all places where concrete materials are stored, proportioned or mixed. The Contractor shall assist in obtaining and storing of samples for testing. THE CONTRACTOR SHALL PAY FOR ALL TESTING.

##### C. Storage of Materials:

Cement and aggregates shall be stored in such a manner as to prevent deterioration or absorption of foreign matter. Any materials which have deteriorated or has been damaged shall not be used in the work.

D. Proportioning and Mixing:

- a. Job mixed concrete shall be composed of one part cement, 2 parts fine aggregate and not more than 3 parts of coarse aggregate. Mixing water shall not exceed 6 gallons per sack of cement, including the free water in the aggregates. Mixing shall be continued for at least one minute after all materials are in the mixer.
- b. 'Ready-mix' concrete may be used. Certificates shall be furnished by the mixing plant that the concrete has a minimum 28 day compressive strength of 3000 pounds per square inch when tested by methods described in ASTM Standard C-39-44.

E. Forms:

Forms shall conform to the shape, sizes, and dimensions of members called for on plans, and shall be sufficiently substantial and rigid to prevent leakage of concrete. They shall be properly braced or tied together to maintain their position and shape and be removable without damage to the concrete. Forms for footings may be omitted where soil and workmanship permit adequate encasement to size, subject to the approval of the Engineer.

F. Reinforcement:

Reinforcement shall be free from excessive scale, rust or coatings that will reduce the bond to the concrete. Bars shall be accurately bent and placed in positions shown on drawings, securely supported and fastened, to prevent movement during placement of concrete.

- a. The drawings shall be furnished to the Engineer for approval.

G. Depositing Concrete:

- a. Soil bearing for footings and slabs shall be approved by the Engineer before placing concrete.
- b. Remove water and foreign matter from forms and excavations. Unless otherwise directed, wood forms shall be thoroughly wetted just prior to placing concrete.
- c. Deposit concrete as nearly as practical in its final position to avoid segregation due to re-tumbling or flowing.
- d. Retempering- No concrete that has partially hardened, before or after use for foreign materials, or has been retempered, shall be used.

- e. Continuity of Placing. Concrete shall generally be carried on as a continuous operation until the placing of a individual section is completed. When construction joints are necessary they shall be made and located with the approval of the Engineer.
- f. Compaction. Concrete shall be thoroughly compacted by suitable means during placement, and shall be carefully worked around reinforcement and embedded fixtures, along surfaces and into the corners of forms. Vibrators may be used, provided they are operated under an experienced supervisor and forms are constructed to withstand their action.
- g. Closing Concrete Construction Joints. Before placing concrete adjoining construction joints in walls or slabs, the surface of the concrete already in place shall be picked brushed clean and given a coat of neat cement grout to provide a proper bond.
- h. Metal Form Holes shall be cut off at least 3/4 inch deep in the concrete immediately after removal of forms, and holes filled with 1:3 cement and sand or use approximately the same color as the concrete. Mortar shall be mixed and placed as dry as practicable, and finish flush with adjacent surface. No spalls shall be used.

#### H. Curing:

- a. Protect all concrete work and cement finishes against injury from the elements and defacement of any nature during construction operations.
- b. Curing. All concrete shall be maintained in a moist condition for at least the first seven days after placing. One of the following methods shall be used for curing unless another or equally efficient method is approved by the Engineer.
  - (1) Burlap Cover. Keep the slab wet by light sprinkling for the first twelve hours, and then cover with two layers of burlap kept continuously wet for the curing period.
  - (2) Paper Cover. Immediately following a initial 12 hours sprinkling period, the surface shall be covered with a strong kraft waterproof paper (Federal Specifications UU-14-14; Type IV Class C), with perimeter edges carefully sealed and sealed, and left in place for the balance of the curing period.

J. Cold Weather Requirements:

Adequate equipment shall be provided to maintain the concrete in shape and protecting the concrete during freezing or near-freezing weather. Concrete and reinforcement, forms, fillers and ground with which the concrete is in contact, shall be free from frost. Whenever the temperature of the surrounding air is below 4 °F., concrete shall have a temperature of between 30°F and 50°F when placed in the forms, and shall be maintained at a temperature of not less than 50°F for at least 72 hours or for as much more time as is necessary to insure a proper rate of curing of the concrete. The covering protection used in connection with curing shall remain in place, and intact, at least 24 hours after artificial heating is discontinued.

K. General requirements:

The contractor shall furnish and install all concrete, forms, reinforcement steel and related items required to complete the work indicated on the drawings and specified herein. Form walls may be built in sections as ordered by the Engineer. All forms must be removed before placing and compacting adjacent fill.

1-6 BAWEE DAM

A. Material:

Borings and Soil Laboratory Analysis indicate that an adequate supply of suitable material is available on the site. Material will be selected by the Engineer and shall be deposited in accordance with his instructions.

1-7 DEPOSITING AND COMPACTION

Fill for the dam shall be deposited in 6 to 12 inch layers and thoroughly compacted with at least 6 passes of equipment to the Engineer's satisfaction. At the time of placing, the soil shall have a water content of 12-18% and shall attain a dry unit weight of 116 pcf. After 4 feet of fill has been placed tests will be made by the Engineer to verify water contents and unit weights and a check log in compacting procedure will be made at this time.

1-8 DRILLWAY CHANNELS

Refer to the drawings for plans and details of the reinforced concrete drillway channels. Construction shall meet all of the requirements specified herein for the concrete flume.

1-5 CHLORINATION LINE

This contractor shall furnish and install Polyethylene flexible pipe and Polyethylene fittings as indicated on the plans from outlet of chlorinator equipment in chlorinator room to outlets in floor and lower face of dam.

This contractor shall furnish and install all the 3/4" IPS corr. steel diffusers with all the or U-shaped injection tubes and one diffuser, channel type for 3/4" connection mounted in floor.

The complete installation shall be made in accordance with requirements of the manufacturer of chlorinator equipment.

Chlorinator equipment and installation in the chlorinator room will be done by others under a other contractor which will be underway at the same time as this contract.

## DIVISION II

### GENERAL SITE WORK

#### 2-1 GENERAL

The General Conditions of the General Contract Specifications apply to all work done under this contract and are hereby made a part of this specification.

#### 2-2 SCOPE

Under this division of the specification the contractor shall complete all work specified herein or indicated on the plans not specifically included in any other division or not noted on the plans as being done by others. This work includes stripping, grading, seeding and sodding, driveways, parking area, concrete splash pad, cleanup of general site area, fencing etc.

#### 2-3 STRIPPING

This contractor shall remove and stockpile where directed existing loam from areas to be disturbed during construction of the dam and bathing area. He shall strip and stockpile where directed all material unsuitable for construction of the dam which prevents access to suitable material. Such material unsuitable for dam construction may be used for grading general site areas as required but the excess of any shall be removed from the site.

#### 2-4 GRADING

This contractor shall grade the site as indicated on the plans to required subgrades.

Subgrades shall be as follows:

Sand areas 1'0" below finish grade.

Lawn areas 4" below finish grade.

Driveways and Parking Areas 3" below finish grade.

All areas from which material for construction of the dam is taken shall be graded to uniform slopes not exceeding 3:1 and in a manner to provide proper and adequate drainage to the satisfaction of the Engineer. Such areas unless specifically otherwise designated on the plans shall become lawn areas.

#### 2-5 SEEDING AND SODDING

All areas designated on the plans and other areas where cover is disturbed during construction of the work to be specifically designated as lawn areas shall be treated as lawn areas and shall be seeded or sodded as required herein.



The top of the new dam as designated on the plans and all areas having a slope 2:1 or greater shall be sodded. Remaining lawn areas shall be seeded.

Sod shall be established loam sod, strongly rooted and free of all weeds and unsuitable grasses. It shall be moved before lifting and have not less than one inch of soil,

Subgrade shall be established at four inches below finish grade and lime shall be applied at the rate of 50 pounds to 1000 square feet.

Top soil shall be spread and lightly compacted to within the thickness of the sod and finished grade. No top soil shall be spread in a frozen or muddy condition.

Sod shall be laid so that no void occurs and shall be tamped or rolled. Screened top soil shall be brushed or raked over the sod area and shall include commercial fertilizer at the rate of 50 pounds to 1000 square feet. Sod shall then be thoroughly watered. The completed sod surface shall be true to finish grade even and firm at all points.

Sod on slopes steeper than 2-1/2 to 1 shall be held in place by wooden pins approximately one inch in diameter and six inches long driven through the sod into the soil until they are flush with the top of the sod.

Soil for lawn areas will consist of loam stripped and stocked under the contract, loam stripped and stockpiled under previous contracts. It is understood that sufficient loam to complete required work exists within the limits of Scot Park and that the contractor will not be required to bring loam to the job from outside the Park limits without additional compensation.

Lime shall be applied to the sub-surface of lawn areas at the rate of 50 pounds to 1000 square feet. Sub-grade soil shall be loosened and mixed to a depth of 2 to 4 inches and all stones over 2 inches in size, sticks and rubbish removed. No heavy objects except lawn rollers shall be moved over lawn areas after the sub-grade soil has been prepared unless the sub-grade soil is again graded and loosened as specified above before topsoil is spread. After the sub-grade soil has been prepared, top soil shall be spread evenly thereon and lightly compacted. No topsoil shall be spread in a frozen or muddy condition. Topsoil shall be brought to finish grade. Allowance for settlement shall be made.

Commercial Fertilizer shall be applied to the lawn areas at the rate of 50 pounds to 1000 square feet. Fertilizer may be applied with seed.

Grass seed shall be of last year's crop available and shall be a mixture of the following kinds in the percentage indicated. The mixture shall not contain over 0.05% weed seeds or 3% inert matter.....

Proportion by Weight	Kind of Seed	Purity	Germination
50%	Crewings N.S. Fescue or Illahee Creeping Fescue	98	85
20%	Kentucky Blue	87	85
30%	Common Ryegrass	90	90

Any soil, manure, dirt or similar material which has been brought onto areas other than lawn areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times. Upon completion of planting all excess soil, stones, and debris which has not previously been cleaned up shall be removed from the site or disposed of as directed by the Engineer.

Lawns shall be protected and maintained by watering, mowing and replanting for at least 60 days and as much longer as is necessary to establish a uniform stand of the specified grasses and until acceptance.

#### 2-6 DRIVEWAYS AND PARKING AREAS

This contractor shall build all driveways and parking areas as shown on the plans. Sub-grade shall be prepared to line and grade 8" below finish grade. 8" of bank gravel meeting the Engineer's requirements and having his approval shall be placed graded and rolled to finish elevations and sections. Gravel shall have no stone greater than 4 inches in cross section. Place 1/2 inch of stone dust on top of gravel, mix thoroughly with upper one or two inches of gravel, wet thoroughly and reroll with heavy roller. Furnish and install drain inlets drain piping headwalls and splash pads as detailed on the plans.

#### 2-7 FENCING

This contractor shall furnish and install a six foot high chain link fence where indicated on the site plan. Posts shall be 10'1" on centers. Line posts shall be 2-1/4" H columns, weighing 4.1# per foot. End, corner, and pull posts shall be 3" diameter 5.179# per foot. Corner bracs shall be 1-5/8" diameter 2.27# per foot and 3/8" round rod trusses with turnbuckles. Top rail shall be 1-5/8" diameter 2.27# per foot. Bottom rail shall be 1-1/2" H beam 2.27# per foot. Fabric shall be 2" mesh - 9 gauge. Gate shall be 10' double swinging, with 3" diameter 5.79# per foot gate posts and 2" diameter gate frame with 5/8" truss rod cross braces. Fabric shall match fence. Gates shall be complete with hinges, locking device and hold backs. Posts shall be set 2'0" in 2'0" deep 12" round 2500# concrete foundation crown top of foundation concrete to shed water.

PLAYGROUND COMMISSION

CHICOPEE, MASS.

\* \* \* \* \*

ADVERTISEMENT FOR BIDDERS

Sealed proposals addressed to the Playground Commission, City Hall, Chicopee, Mass., and endorsed "Proposal for Repair of the Bemis Pond Dam" will be received by the Playground Commission at it's office, City Hall, Chicopee, Mass., until and at that time and place publicly opened and read aloud. Work includes the construction of approximately: 87 feet of six (6) feet by seven (7) feet reinforced concrete discharge conduit; a six (6) foot by seven (7) foot vertical intake structure; the reconstruction and restoration of a section of earthen dam; the alteration to concrete foot bridge and spillway walls; and the placement of riprap in the discharge channel.

Proposal Guaranty: \$1,000.00 certified check or lawful money. Plans, specifications and proposal forms may be obtained at the office of Tighe & Bond, Inc., Consulting Engineers, Bowers & Pequot Streets, Holyoke, Mass., or at the office of City Engineer, City Hall, Chicopee, Mass. Charge for Plans and Specifications \$10.00. Said amount returnable to bidders who return Plans and Specifications in good condition within seven (7) days after the opening of bids. Minimum wage rates established. A Performance and Payment Bond in the full amount of the contract will be required. The Playground Commission reserves the right to waive any informality in or to reject any or all proposals, or to accept any proposal which, in their opinion, is in the best interests of the City. No proposal may be withdrawn within thirty (30) days after the bid opening.

PLAYGROUND COMMISSION

CHICOPEE, MASS.

**PROPOSAL  
FORM**



**TIGHE & BOND  
CONSULTING ENGINEERS  
HOLYOKE, MASS.**

PROPOSAL  
TO THE  
PLAYGROUND COMMISSION  
CHICOPEE, MASS.  
FOR THE  
REPAIR OF THE BEMIS POND DAM

The undersigned bidder declares that the only person or parties as principals interested in this proposal are named below, that this proposal is made without collusion with any other person, firm or corporation, that he has carefully examined the location of the proposed work and has taken into consideration all the difficulties likely to be met with in the doing of the work, that he also has carefully examined the annexed form of contract and the plans therein referred to and entitled:

"BEMIS POND  
DAM REPAIRS  
PLAYGROUND COMMISSION  
CITY OF CHICOPEE, MASS."

TIGHE & BOND, INC.  
Consulting Engineers  
Holyoke, Mass.

Complete set ---- sheets  
June - 1957 "

And he proposes and agrees that he will contract with the City of Chicopee, Mass., acting thru its Playground Commission, in the form of contract annexed to provide all the insurance, labor, machinery, tools, apparatus and other means of construction and to do all the work and furnish all the materials specified in the contract and in the manner and time therein prescribed and in accordance with the requirements of the Engineer, as herein set forth and that he will take in full payment therefor the following sums to wit:

ITEM NO.	ESTIMATED QUANTITIES	UNIT BID PRICE WRITTEN IN WORDS AND FIGURES	AMOUNT OF ITEM DOLLARS CENTS.
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1. Lump sum For furnishing all labor, tools, materials and equipment required for the construction of the intake structure, discharge conduit, the re-alignment of the existing cast iron draw-down pipe and the sluiceway in accordance with the details shown on the plan and as further described in the specifications, the sum of:

(\$ ) Lump sum \$

2. Lump sum For furnishing all labor, tools, materials, and equipment required to construct an access bridge from the top of the dam embankment to the top of the intake structure in accordance with the details shown on the plan and as further described in the specifications, the sum of:

(\$ ) Lump sum \$

3. Lump sum For furnishing all labor, tools, materials and equipment required to prepare the foot bridge across the existing spillway for the alteration of the existing concrete walls forming the abutments for the bridge and for the restoration of the bridge after completion of the alterations to the walls in accordance with the details shown on the plans and as further described in the specifications, the sum of:

(\$ ) Lump sum \$

4. 150 cu. yds For each cubic yard of trench excavation and backfill completed around the existing walls at the foot bridge and spillway and for placing riprap downstream from the discharge conduit and existing spillway and for installing concrete steps abutting the access bridge, including all labor, materials, tools, equipment and control of water, required for or incidental to the item as herein described, the sum of:

(\$ ) cu. yds. \$

ITEM NO.	ESTIMATED QUANTITIES	UNIT BID PRICE WRITTEN IN WORDS AND FIGURES	AMOUNT OF ITEM DOLLARS CENTS
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5. 11  
cu. yds For each cubic yard of 3,000 lb.  
28-day test concrete furnished and  
installed in altering the walls at  
the foot bridge and along the ex-  
isting spillway and for the steps  
between the top of the bridge embank-  
ment and the end of the access bridge,  
including all labor, tools, materials  
and equipment required for or incidental  
to the item, as herein described, the  
sum of:

(\$ ) cu. yds \$

6. 385  
lbs. For each pound of reinforcing  
steel furnished and installed  
in the concrete wall altera-  
tions around the footbridge and  
spillway and in the concrete  
steps, between the top of the  
embankment and the end of the  
access bridge, including all  
labor, tools, materials, bending  
and cutting required for or inci-  
dental to the item, as herein des-  
cribed, or as required, the sum of:

(\$ ) per lb. \$

7. 240  
cu. yds. For each cubic yard of riprap  
furnished and placed in the discharge  
channel downstream from the dis-  
charge conduit and around the exist-  
ing spillway, including all labor,  
tools, material, equipment, and  
control of water required for or  
incidental to the item, as herein  
described, the sum of:

(\$ ) per cu. yd. \$

ITEM NO.	ESTIMATED QUANTITIES	UNIT BID PRICE WRITTEN IN WORDS AND FIGURES	AMOUNT OF ITEM DOLLARS CENTS
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8	150 sq. yd.	For each square yard of filling, loaming, seeding & fertilizing, completed in the areas abutting the existing spillway walls includ- ing all labor, tools, materials and equipment required for or incid- ental to the item, as herein des- cribed, the sum of:	
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\$ \_\_\_\_\_

(\$ \_\_\_\_\_ )

TOTAL AMOUNT OF BID - Items 1 thru 8, inclusive \$ \_\_\_\_\_

If this proposal shall be accepted by the Playground Commission, Chicopee, Mass., the undersigned bidder agrees to meet the requirements of Article 62 regarding the beginning of work, and he further agrees to the provisions of Article 67 and specifies that the job shall be completed within \_\_\_\_\_ calendar days (fill in using both letters and figures) from the date of the signing of the contract.

If this proposal shall be accepted by the Playground Commission of Chicopee, Mass., and the undersigned shall fail to contract as aforesaid and to give a performance and payment bond in the sum of the full amount of the contract with a surety company satisfactory to the Board within ten (10) days of the date of the notice to him from the Owner that the Contract is ready for signature, then he shall be considered to have abandoned the contract and his certified check for \$1000.00 accompanying this proposal shall become the property of the City of Chicopee, Mass.

DATED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ in the year 1957.

SIGNATURE OF BIDDER \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

BUSINESS ADDRESS \_\_\_\_\_

RESIDENCE \_\_\_\_\_



In compliance with Article 5, Section B, the Bidder, if this bid is submitted by a firm, partnership or corporation, shall list required information below:

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The proposed Surety Company on the Bond is to be as follows:

Name: \_\_\_\_\_

Address of Home Office: \_\_\_\_\_

Name and address  
of Agent:

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# **GENERAL REQUIREMENTS**



**TIGHE & BOND  
CONSULTING ENGINEERS  
HOLYOKE, MASS.**

## GENERAL REQUIREMENTS

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### DEFINITION OF TERMS

#### Article 1. Definition of Terms.

Wherever in these specifications or other contractual documents the following terms, or pronouns in place of them, are used, the intent and meaning shall be interpreted as follows:

- Addendum ..... An addition to or alteration of the Plans and/or Specifications generally issued for clarification purposes prior to the opening of proposals.
- Advertisement ... The notice published in newspapers and trade bulletins announcing the time and place for the opening of bids for work to be done.
- A.A.S.H.O. ..... The American Association of State Highway Officials.
- Alteration ..... Change in the form or character of any of the work done or to be done.
- A.S.T.M. ..... The American Society for Testing Materials.
- Bidder ..... Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.
- Contractor ..... A party to the contract, acting directly or through an authorized lawful agent or employee.
- Engineer ..... The Consulting Engineer acting directly or through an authorized representative, such representative acting within the scope of the particular duties entrusted to him.
- Extra Work ..... Work or materials not called for in the Plans and Specifications and which is deemed necessary for the proper completing of the improvement.
- Layout ..... See Right of Way.
- Location ..... See Right of Way.
- Material ..... Any substance proposed to be used in connection with the construction of the project and its appurtenances.
- Owner ..... The duly authorized official or officials in charge of the project.

- Plans ..... The contract drawings, Detail Sheets, or exact reproductions thereof, which show the location, character, dimension and details of the work including any alterations thereof permissible under the contract and authorized by duly approved written orders.
- Proposal ..... The written offer of the Bidder submitted in approved form to perform the work contemplated.
- Project ..... The purpose for which bids have been called and work contracted for.
- Right of Way .... That area which has been laid out or acquired for the purpose of this project.
- Special Provisions .. The special directions, provisions and requirements prepared to cover proposed work not satisfactorily provided for by these General Requirements. These special provisions shall be included within the general term "Specifications" and shall be made a part of the contract with the express purpose that they shall prevail over all other specifications.
- Specifications .. The directions, provisions and requirements, designated as Specifications, together with all written agreements made or to be made pertaining to the method and manner of performing the work, or the quantities and qualities of materials to be furnished under the Contract. The Specifications shall include the Advertisement, Proposal Form, General Requirements, Standard Detail Drawings, Special Provisions, Addenda and Contract Form.
- Work ..... All performance, including the furnishing of materials, labor, tools, equipment and incidentals, required of the Contractor under the terms of the contract.
- The Words ..... "As directed", "as permitted", "as required" or words of like effect shall mean that the direction, permission or requirement of the Engineer is intended, and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean approved by or acceptable or satisfactory to the Engineer, unless otherwise provided herein. The words "necessary", "suitable", "equal" or words of like import shall mean necessary, suitable or equal in the opinion of the Engineer.

The words "approval of the Owner" or "approval by the Owner" shall mean approval either by vote of or in writing by the duly authorized officials.

## PROPOSAL REQUIREMENTS AND CONDITIONS

### Article 2. Contents of Proposal Forms.

Proposal forms consisting of the documents listed below will be furnished by the Owner to the bidder upon request at the office of the Engineer.

- A. The Specifications; including the Advertisement, General Requirements, Special Provisions, Standard Detail Drawings, Addenda, Proposal Form and Contract Form.
- B. The Plans.

### Article 3. Interpretation of Basic Estimate of Quantities.

- A. All bids will be compared on the basis of the Engineer's estimate of quantities of work to be done, as shown in the Proposal.

These quantities are approximate only, being given as a basis for the comparison of bids, and the Owner does not expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class, item or portion of the work, as may be deemed necessary or expedient by the Owner.

Bidders are required to submit their estimate upon the following express conditions, which shall apply to and become part of every bid received, viz:

An increase or decrease in the quantity for any item or group of items shall not be regarded as cause for an increase or decrease in the prices, nor in the time allowed for the completion of the work, except as provided in the contract. An increase or decrease in the quantity of work to be done shall not warrant any claim for loss, damage or anticipated profit.

- B. The work has been divided into classes and items in order to enable the bidder to bid on the different portions of the work in accordance with his estimate of their cost, so that in the event of an increase or decrease in the quantities of any particular class of work the actual quantities executed may be paid for at the price bid for that particular class of work.

### Article 4. Examination of Plans and the Location.

Statements as to the condition under which the work is to be performed, including plans, surveys, measurements, dimensions, calculations, estimates, borings, etc., are made solely to furnish a basis for comparison of bids, and the Owner does not guarantee or represent that they are even approximately correct. The Contractor must satisfy himself by his own investigation and research regarding all conditions affecting the work to be done and labor and material needed, and make his bid in sole reliance thereon. The Contractor should carefully examine any materials furnished

by the Owner, the location of the work, the difficulties likely to be met in doing the work and all other factors relating to the Project.

## Article 5. Preparation of Proposals

### A. Bid Prices.

The Bidder shall submit his proposal upon the blank forms furnished by the Owner. The bidder shall specify a unit price, in both words and figures, for each and every item for which a quantity is given, and shall also show the products of the respective unit prices and quantities, written in figures in the column provided for that purpose, and the total amount of the proposal obtained by adding the amounts of the several items. All words and figures shall be in ink. In case of a discrepancy between the prices written in words and those written in figures, the written words shall govern. In case of a discrepancy between the unit prices and the extended totals, the unit prices shall govern.

No bid will be accepted which does not contain a unit price for every item shown on the Proposal Form. No conditional bids will be accepted.

When an item in the Proposal contains a choice to be made by the bidder, the bidder shall indicate his choice in accordance with the specifications for that particular item, and thereafter no further choice will be permitted without permission from the Owner.

The price for any item, bid and/or contracted for, unless otherwise noted or specified shall include full compensation for all materials, equipment, tools, labor and incidental work, necessary to complete the item to the satisfaction of the Engineer. The prices shall, without exception, include all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the work.

### B. Signatures.

All proposals shall be signed correctly with ink in the proper places provided, as follows:

If the proposal is made by an individual, his name and post office address shall be given.

If the proposal is made by a firm, partnership or corporation it shall be signed by a person having such legal authority from the said firm, partnership or corporation and the person so signing the proposal shall give his own name and title (if any) in addition to the name and address of the firm, partnership or corporation.

If the proposal is made by a firm or partnership the names and addresses of the individual members shall be given.

If the proposal is made by a corporation, the name of the State under the laws of which the corporation was chartered and the names, titles and business addresses of the President, Treasurer and Manager shall be given.

#### Article 6. Delivery of Proposals.

Each Proposal shall be submitted to the Owner in a sealed envelope. On the outside of the envelope shall be written the bidder's name and address and the name of the project for which the bid is submitted.

If forwarded by mail, the sealed envelope containing the Proposal, and marked as directed above, must be enclosed in another envelope addressed to the Owner. The recommended method of mailing shall be "Registered-Return Receipt Requested."

Proposals received by the Owner at the designated place after the time designated in the Advertisement for Bidders will be returned to the bidder unopened.

It is the bidder's responsibility to see that his Proposal is at the designated place at the designated time. The Owner will not receive any Proposal not delivered to the designated place.

#### Article 7. Proposal Guaranty Required.

In order to insure the faithful fulfillment of its terms, each Proposal shall be accompanied by a certified check or lawful money as directed in the Special Provisions. Said check will be returned to the bidder unless retained by the Owner under the conditions hereinafter stipulated.

A bid bond will not be accepted as security.

#### Article 8. Public Opening of Proposals.

Proposals will be publicly opened and read aloud at the time and place indicated in the Advertisement for Bidders. Bidders or their authorized agents are invited to be present.

#### Article 9. Rejection of Proposals.

Proposals which fail to meet the requirements of Articles 5, 6 and 7, or which are incomplete, conditional or obscure, or which contain additions not called for, erasures, alterations or irregularities of any kind, or in which errors occur, or which contain abnormally high or abnormally low bid prices for any class of item of work, may be rejected as informal. The Owner may waive any informalities in or reject any or all bids and may accept any bid the Owner deems to be in his best interests or in the best interests of the group represented by the Owner.

More than one proposal from the same bidder, whether or not the same or different names appear on the signature page, will not be considered. Reasonable proof for believing that any bidder is so interested in more than one proposal for the work contemplated will cause the rejection of all proposals made by him directly or indirectly. Any or all proposals will be rejected if there is reason for believing that collusion exists among the bidders.

Bidders whose proposals have been rejected because of evidence of collusion as specified in Article 9 will not be considered in future proposals for the same work, and such bidders may be disqualified from bidding on future work.

#### Article 10. Withdrawal of Proposals.

Any bid may be withdrawn prior to the scheduled time for opening as shown in the Special Provisions or authorized postponement thereof.

No bidder may withdraw a bid within 30 days after the actual date and time of the opening thereof.

#### Article 11. Competency of Bidders.

No contract will be awarded except to responsible bidders capable of performing the class of work contemplated. Before the award of the contract, any bidder may be required to show that he has the necessary facilities, experience, ability and financial resources to perform the work in a satisfactory manner and within the time stipulated. If the contract contains special work of a complicated nature or if it contains items for materials or work the character of which will depend upon the Contractor's skill or experience, he will be required to show proof that he has a satisfactory record of similar work performed or materials furnished under other contracts. Bidders may be required to furnish the Owner with formal sworn statements as to their experience and their financial status.

#### Article 12. Material Guaranty.

Before any contract is awarded, the Bidder may be required to furnish without expense to the Owner a complete statement of the origin, composition and manufacture of any or all materials proposed to be used in the construction of the work, together with samples, which samples may be subjected to the tests required by the Owner to determine their quality and fitness for the work.

#### Article 13. Addenda and Interpretations.

No interpretation of the meaning of the plans, specifications or other contract documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the office of Tighe & Bond, Consulting Engineers, Bowers & Pequot Streets, Holyoke, Mass., and to be given consideration must be received at least five days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by registered mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes) not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.



## AWARD AND EXECUTION OF THE CONTRACT

### Article 14. Consideration of Bids.

The Owner reserves the right to reject any or all proposals, to waive technicalities, and to advertise for new proposals, or proceed to do the work otherwise, as it may deem best for its own interests.

### Article 15. Award of Contract.

The bids will be compared on the basis of the totals of the sums obtained by multiplying the Engineer's estimate of quantities by the unit price stated on the Proposal for each respective item.

The lowest bidders will be determined as described in the above paragraph. The responsible bidders will be determined as described in Articles 9, 11 and 12.

The Contract will be awarded by the Owner as soon as practicable after the opening of bids. The successful bidder will be notified in writing, by mail, or otherwise, that his bid has been accepted and that he has been awarded the contract.

### Article 16. Return of Proposal Guaranty.

The Proposal Guaranty will be returned to all except the three lowest formal bidders within three days after the opening of the bids. The Proposal Guaranty of each of the three lowest formal bidders will not be released by the Owner until after a Contract has been executed. Within three days after the signing of a Contract, the Proposal Guaranty of each of the three low bidders will be returned except as hereinafter provided.

The Proposal Guaranty submitted with any bid rejected as informal will be returned within three days of said rejection.

### Article 17. Contract Bond Required.

Prior to the execution of the Contract, the Contractor will be required to furnish a surety bond in the amount specified in the Special Provisions as security for faithful performance of this Contract. The bond shall also guarantee payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract.

The bond must be in the usual and approved form and must also contain the following: "and shall pay for all labor performed or furnished and for all materials used or employed, and shall pay all persons who contract with the principal for labor and materials as provided in the

General Laws of Massachusetts, Chapter 149, then this obligation to be void, otherwise to remain in full force and effect."

Attorneys in fact who sign bid bonds or contract bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

The surety is to be a bonding company or securities satisfactory to the Owner.

#### Article 18. Execution of Contract.

The Contractor to whom the contract is awarded will be required to appear at the office of the Engineer with the surety offered by him, and execute the contract within 10 calendar days from the date of the notice from the Owner or Engineer to the bidder that the contract is ready for signature. The contract shall be in writing on the forms provided.

#### Article 19. Failure to Execute Contract.

Should the successful bidder fail to execute the contract and furnish the contract bond insurance, as herein specified, within the time stipulated, the Owner may, at its option, determine that the bidder has refused to execute a Contract with the Owner. The Owner will consider the Proposal Guaranty forfeited by the Bidder. The Owner will then offer the Contract to the second lowest responsible Bidder.

### SCOPE OF WORK

#### Article 20. Intent of Plans and Specifications.

It is the intent that the plans and specifications shall prescribe a complete work or improvement; and when the work is completed, the Contractor shall leave the job site in a neat and finished condition.

The Contractor shall do all the work and furnish all the materials, tools and appliances, except as otherwise specified, necessary or proper for performing and completing the work required by the contract, in the manner and within the time specified. He shall complete the entire work to the satisfaction of the Engineer, and in accordance with the specifications and drawings for the work, at the prices agreed upon.

All the work, labor and materials to be done and furnished under the contract shall be done and furnished strictly pursuant to, and in conformity with the specifications and the plans for the work, which said specifications and drawings shall form part of the contract, and also in accordance with the directions of the Engineer as given from time to time during the progress of the work, under the terms of the contract.

#### Article 21. Special Conditions.

Construction items or conditions anticipated for any proposed work, and not covered by these "General Requirements", will be described and specified in "Special Provisions". Said Special Provisions shall be

considered a part of the contract. In case of conflict between the said Special Provisions and General Requirements, the Special Provisions shall govern.

Article 22. Alteration of Work.

Should it be found desirable by the Engineer to make alterations in the form or character of any of the work done, or to be done, the Engineer may order such alterations to be made, defining them in writing, supplemented with drawings when in the opinion of the Engineer it is necessary, and the alterations shall be made accordingly; provided that in case such alterations increase the cost of the work the Contractor shall be remunerated at prices based on prices allowed on the same character of work under the specifications, and in case the alterations shall diminish the cost of the work no allowance will be made for anticipated profits.

In case of any alteration, change or addition to the work as originally contemplated, and if said alteration, change or addition justified an increase in the cost of the work, the Owner reserves the right to decide the method that will be used to determine said additional costs. (see Article 73.)

In case of any alterations, so much of the contract as is not necessarily affected by such alterations shall remain in force upon the parties thereto, and such alterations shall be made under the terms of and as a part of the contract, and the security for the performance of the contract shall in nowise be invalidated, but shall be held to secure in like manner the performance of the alterations made under the contract and of any extra work done under the provisions of Article 23.

The Contractor shall perform the work as increased or decreased within the qualifying limits named and subject to the provisions outlined above, but no allowance shall be made for any change in anticipated profits. Adjustments shall be considered waived unless specific complaint is made in writing by the Contractor previous to the construction of such alteration or change and within three calendar days following notice from the Owner of such alteration or change.

Article 23. Extra Work.

The Contractor shall do any work not herein otherwise provided for, when and as ordered in writing by the Engineer, such written order to contain particular reference to this article.

If the Contractor claims that any instructions from the Engineer involve extra cost or an extension of time, he shall so notify the Engineer in writing within three calendar days after the receipt of the Engineer's instructions and in any event before proceeding to execute the extra work. No claim from the Contractor will be considered valid unless made in accordance with the terms of this Article.

Such notice by the Contractor and the keeping of costs by the Engineer shall not in any way be construed as proving the validity of the claim.

Payment for extra work will be made in accordance with the provisions of Article 73.

The Owner may at any time, by a written order, and without notice to the Surety or Sureties, require the performance of such changes in the work as it may find necessary or desirable.

Article 24. Maintenance of Detours.

When required by the Owner, a project shall be closed to travel during construction. Suitable detours shall be provided and maintained as directed or as specified in the "Special Provisions" and in Articles 50 and 51. Payment for this work is to be included by the Contractor in his unit prices for the various items of work. No special payment will be provided unless otherwise stated under "Special Provisions."

Article 25. Removal and Disposal of Structures and Obstructions.

Existing structures such as bridges, culverts, dikes, walls, pipes, guard railing, fences, street railway ties and rails, found within the project limits on right-of-way, which are to be replaced or rendered useless by new construction shall be removed by the Contractor at his own expense unless otherwise provided in the Special Provisions. When their location is such as not to interfere with the work, the removal shall not be done until the new structures replacing them are ready for traffic or until the Engineer shall permit.

All material in existing structures requiring removal shall remain the property of the Owner. The material shall be removed without damage, in sections which will permit easy handling and disposal, to locations within the limits of the project, and convenient for their subsequent removal by the Owner, or as directed by the Engineer. All discarded material, rubbish or debris shall be removed from the work and disposed of as directed. No foreign material or debris shall be permitted to remain or move in a waterway.

Article 26. Rights in the Use of Materials Found on the Work.

The Contractor, with the approval of the Engineer, may take suitable ledge, gravel, sand, loam, clay or other material from within the location lines of the project under construction and use it for other purposes than for forming embankments. If such use necessitates securing additional material for forming embankments, the Contractor shall at his own expense, furnish an amount of borrow of a satisfactory quality, equal to the amount of material taken, as measured in excavation. The Contractor shall not excavate or remove any material which is not within the excavation as indicated by the slope stakes and grade lines, without written approval. No excavated material suitable for use shall be wasted, unless as directed.

Unless otherwise provided the material from any existing structure may be used temporarily by the Contractor during construction. Such material shall not be cut, bent, broken or otherwise damaged.

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil; but all such materials shall, upon being so attached or affixed, become the property of the Owner.

Article 27. Final Cleaning Up.

Upon completion of the work and before acceptance and final payment, the Contractor shall remove, at his own expense, from the project location and from adjoining property, all temporary structures and all surplus material and rubbish which may have accumulated during the prosecution of the work, and shall leave the work broom clean and in a neat and orderly condition. The Contractor shall clean up the job so that the condition of the site will be at least equal to its condition before work began.

No equipment or materials shall be left on the right-of-way or project limits without the written permission of the Engineers.

CONTROL OF WORK

Article 28. Authority of the Engineer.

The Engineer shall decide all questions which may arise as to the quantity, quality, acceptability, fitness and rate of progress of the several kinds of work to be performed and materials to be furnished under the contract, and shall decide all questions which may arise as to the interpretation of any part of the contract, especially the plans and specifications which are a part thereof, as to the fulfillment of this contract on the part of the Contractor, and the determination and decision of the Engineer shall be final and conclusive; and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

Article 29. Plans and Detail Drawings.

Approved plans, profiles and sections on file in the office of the Engineer will show the location, details and dimensions of the work contemplated, and all work shall be in strict conformity therewith and with the specifications.

Supplemental plans and detail drawings as required in the specifications and furnished by the Contractor shall upon approval become a part of the complete plans. Such approval of supplemental plans or detail drawings, however, shall not be construed as a complete check and shall not operate to relieve the Contractor of any of his responsibility under the contract for the satisfactory completion of the work, nor for the accuracy of the dimensions, details or quantities or for their agreement.

When submitting detail drawings for approval, complete sets of prints as directed shall be furnished the Engineer who will return one set either approved or with corrections marked thereon. Finally, the Contractor shall

furnish the Engineer with complete sets of prints as directed of the corrected and approved detail drawings. No changes shall be made in the approved drawing without the written consent of the Engineer.

The contract price shall include the cost of furnishing all working drawings and the contractor will be allowed no extra compensation therefor. The Engineer will specify the number of sets of approved detail drawings that will be required.

Any work done or materials furnished by the Contractor prior to the approval of the working drawings shall be at his own risk.

#### Article 30. Conformity with Plans and Allowable Deviations.

The finished work shall conform in all respects to the lines, grades, cross sections and dimensions given on the approved plans. Where conditions make it necessary or desirable for major deviation from the approved plans, such changes shall be made as specified in Article 22 and 23, upon authorization in writing by the Owner.

#### Article 31. Co-ordination of Specifications and Plans.

The General Requirements, the Addenda, the Proposal Form, the Contract Form, the Plans, the Special Provisions, and all supplementary documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be cooperative; to describe and provide for a complete work. In case of disagreement, the Plans shall have precedence over the General Requirements and the Special Provisions shall govern over both the Plans and the General Requirements; figured dimensions shall govern over scaled dimensions.

#### Article 32. Co-operation by Contractor.

The Contractor will be given two copies of approved contract drawings, detail sheets, contract and special provisions. He shall have one copy of all such information and a copy of the specifications on the work and available for reference at all times during the prosecution of the work. He shall have at all times a competent and reliable superintendent or foreman on the work, authorized to receive orders and to act for him. Whenever the Contractor is not present on any part of the work when it may be desired to give directions, orders will be given by the Engineer and they shall be received and executed by the foreman or superintendent who is in charge of the particular work in reference to which the orders are given.

The Contractor shall provide all reasonable facilities to enable the Engineer to inspect the workmanship and materials entering into the work. He shall cooperate in the matter of setting and preserving stakes, bench marks, etc., for controlling the work.

The Contractor shall so carry on his work under the direction of the Engineer that public service corporations, or municipal departments may enter on the work to make changes in their structures or to place new structures and connections therewith without interference, and the Contractor shall have no claim for or on account of any delay which may be due to

or result from said work of public service corporations or municipal departments.

Article 33. Adjacent Contracts.

The Contractor shall carry on his work concurrently with that being done on other contracts or work (if any) adjacent to or in conjunction with the project, so as to provide for all possible cooperation towards the satisfactory completion of the work with a minimum of delay and inconvenience. Where necessary and insofar as possible he shall permit other contractors free and unobstructed passage over the work. He shall have no claim for or on account of any damage or delay due to the operations of other contractors or their movements over his section of the work.

Article 34. Construction Stakes.

The Contractor shall furnish, free of charge, all stakes and such temporary structures as may be necessary for marking and maintaining points and lines given by the Engineer for the building of the work, and shall give the said Engineer such facilities and materials for giving said lines and points as he may require; and the Engineer's marks shall be carefully preserved.

Article 35. Authority and Duties of Engineer's Assistants.

The Engineer may appoint such assistants and representatives as he desires and they shall be authorized to inspect work and materials, to give directions pertaining to the work or to the safety and convenience of the public, to approve or reject materials, to make measurements of quantities and to perform such other duties as may be designated by the Engineer.

In case of any dispute arising between the Contractor and the Engineer's assistants, as to materials furnished or the manner of performing the work, the Engineer's assistants shall have the authority to reject the materials or to suspend the work until the question at issue can be referred to and decided by the Engineer.

Engineer's assistants are not authorized to revoke, alter, enlarge, relax or release any requirements of these specifications, nor to issue instructions contrary to the plans and specifications. They shall in no case act as foreman or perform other duties for the Contractor.

Article 36. Inspection of Work and Materials.

The Engineers agents and employees of the Owner may for any purpose enter upon the work and premises used by the Contractor and the Contractor shall provide safe and proper facilities therefor.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the terms of the Contract as herein prescribed by the plans and the specifications.

The Contractor shall furnish the Engineer or his authorized representative with every reasonable facility and assistance for ascertaining whether or not the work as performed is in accordance with the requirements and intent of the plans and specifications. If so directed, the Contractor shall, at any time, before the acceptance of the work, remove or uncover any portions of the finished work necessary for inspection. After the inspection the Contractor shall restore said portions of the work to the condition required by the specifications.

The Contractor shall furnish written information to the Engineer stating the original sources of supply and dates of manufacture of all materials manufactured away from the actual site of the work. In order to insure a proper time sequence for required inspection and approval this information shall be furnished at least two (2) weeks (or otherwise directed by the Engineer) in advance of the incorporation in the work of any such materials.

Failure to reject any defective work or materials shall not in any way prevent later rejection when such defect is discovered, or obligate the owner to make final acceptance.

#### Article 37. Removal of Defective or Unauthorized Work.

All defective work shall be removed, repaired or made good, notwithstanding that such work has previously been inspected and approved or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall at his own expense make good such defect in a satisfactory manner.

Any work done beyond the lines and grades shown on the plans or as given, except as herein provided, or any extra work done without authority, shall be considered as unauthorized and at the expense of the Contractor. Such work will not be measured nor compensation allowed therefor. Work so done may be ordered removed at the Contractor's expense.

Upon failure of the Contractor to remove and satisfactorily dispose of any or all defective or unauthorized work, and to remedy the same after being so notified, the Engineer may cause such defective work to be remedied, removed and replaced, and such unauthorized work to be removed; and to deduct the costs therefor, from any moneys due or to become due the Contractor.

#### Article 38. Final Inspection.

Before any acceptance of the entire project the Engineer will make a complete final inspection of the work done.

If the work or any part thereof is not acceptable to the Engineer at the time of the final inspection, he shall notify the Contractor in writing of the particular defects or parts to be remedied before final acceptance. If the Contractor has not arranged within a period of five (5) days after the date of transmittal of such notice of nonacceptability, to complete the work speedily as described by the Engineer, the Engineer may without further notice and without in any way affecting the contract, make such other arrangements as he may consider necessary to insure the satisfac-



tory completion of the project. The cost of so completing the work shall be deducted from any moneys due or which may become due the Contractor under the contract.

### CONTROL OF MATERIALS

#### Article 39. Source of Supply and Quality.

The source of supply of each material shall be approved by the Engineer before delivery is started.

The Contractor shall furnish all materials required for the work specified in the contract, and said materials shall meet the requirements of the specifications for the kind of work involving their use.

Only new and first quality materials, conforming to the requirements of these specifications and approved by the Engineer shall be used in the work. If, after trial, it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources.

The Contractor may be required to furnish sworn certificates as to quality and quantity of materials before said materials are incorporated in the work.

#### Article 40. Samples and Tests.

Tests of materials will be made by the Board or under its direction. The Contractor shall furnish such facilities as the Engineer may require for collecting and forwarding samples, and shall not make use of, or incorporate in the work, any material represented by the samples until the required tests have been made and the material accepted. The Contractor in all cases shall furnish the required samples without charge. Where tests are required of materials already incorporated in the work, the Contractor shall furnish samples, cut from the completed work at a time and as directed by the Engineer. The area affected by the removal shall be replaced and refinished, and the Contractor will receive no special compensation for any of the aforesaid work.

#### Article 41. Delivery and Storage of Materials.

Materials and equipment shall be progressively delivered at the site so that there will be neither delay in the progress of the work nor an accumulation of material that is not to be used within a reasonable time.

Materials shall be stored at the expense of the Contractor so as to insure the preservation of their quality and fitness for the work. When considered necessary by the Engineer, they shall be placed on wooden platforms or other hard clean surfaces, and not on the ground, and shall be placed under cover when directed. Stored materials shall be so located as to facilitate prompt inspection.

#### Article 42. Defective Materials.

Materials not conforming to these specifications shall be rejected, and removed from the work by the Contractor as directed. No rejected material, the defects of which have been subsequently corrected, shall be used except with the permission of the Engineer. Should the Contractor fail to remove defective material within the time indicated in writing, the Engineer shall have the authority to remove and replace the defective material, and the cost of such removal and replacement will be deducted from any moneys due or to become due the Contractor.

### LEGAL RELATIONS AND CONTRACTOR'S RESPONSIBILITY

#### Article 43. Laws to be Observed.

The Contractor shall keep himself fully informed of all existing and future state and national laws and municipal ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the contract for this work in relation to any such law, ordinance, regulation, order or decree, he shall forthwith report the same to the Engineer in writing. He shall at all times himself observe and comply with, and shall cause all his agents and employees to observe and comply with, all such existing and future laws, ordinances, regulations, orders and decrees.

The Contractor shall comply with the provisions of Chapter 461 of the Acts of 1935. A table of the minimum wage rates is attached hereto.

The Contractor's attention is directed to the fact that all applicable State and Municipal Laws; and rules and regulations of all authorities having jurisdiction over the construction work in the locality of the project shall apply to the Contract throughout, and they are deemed to be included herein the same as though herein written out in full.

#### Article 44. Insurance Requirements.

##### A. Compensation Insurance for Workmen and Traffic Officers:

##### 1. Workmen.

The Contractor shall, before commencing performance of the contract, provide by insurance for the payment of compensation and the furnishing of other benefits under Chapter 149, Section 34A and Chapter 152 of the General Laws, Tercentenary Edition, to all persons to be employed under the contract, and he shall continue such insurance in full force and effect during the term of the contract.

Failure to provide and continue in force such insurance as aforesaid shall be deemed a material breach of the contract and shall operate as an immediate termination thereof.

No cancellation of such insurance, whether by the insurer or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the officer or agent who awarded the contract at least fifteen days prior to the intended effective date thereof, which date shall be expressed in said notice. Notice of cancellation sent by the party proposing cancellation, by registered mail, postage prepaid, with a return receipt of the addressee requested, shall be sufficient notice. An affidavit of any officer, agent or employee of the insurer or of the insured, as the case may be, duly authorized for the purpose, that he has so sent such notice addressed as aforesaid shall be prima facie evidence on the sending thereof as aforesaid. This section shall apply to the legal representatives, trustee in bankruptcy, receiver, assignee, trustee and the successor in interest of any such Contractor.

The aforesaid insurance shall be taken out and maintained at the Contractor's own expense.

## 2. Traffic Officers.

The Contractor shall take out and maintain at his own expense, insurance against damages arising from injury to special uniformed police, referred to in Article 58, while they are engaged in the performance of their duties. The coverage and provisions of such insurance shall be similar to those required to insure employees of the Contractor under the Workmen's Compensation Act, and shall be in addition thereto.

The aforesaid insurance shall be taken out and maintained at the Contractor's own expense.

## 3. Contractor's Public Liability and Property Damage Liability Insurance.

The Contractor shall furnish evidence to the Board that, with respect to the operations he performs, he carries Contractor's Public Liability Insurance providing for a limit of not less than a monetary value specified in the Special Provisions for all damages arising out of bodily injuries to or death of one person, and, subject to that limit for each person, a total limit of a monetary value specified in the Special Provisions for all damages arising out of bodily injuries to or death of two or more persons in any one accident, and Contractor's Property Damage Liability Insurance providing for a limit of not less than a monetary value specified in the Special Provisions for all damages arising out of injury to or destruction of property in any one accident and, subject to that limit per accident, a total (or aggregate) limit of a monetary value specified in the Special Provisions for all damages arising out of injury to or destruction of property during the policy period.

If any part of the work is sublet similar insurance shall be provided by or in behalf of the subcontractors to cover their operations.

Such property damage and public liability insurance as are provided under this Contract must cover all the various types and items of work that are to be undertaken. For the purposes of this Contract the insurance shall be considered to be in full effect from the date of signing of the Contract to the date of the final acceptance of the work.

Such public liability and property damage insurance as are provided under this contract must carry a clause or rider agreeing to "assume the defense of and indemnify and save harmless the Owner, together with his officers, employees and agents, from all suits, loss, cost or damage arising out of or attributable to claims related to the project."

Satisfactory proof of insurance coverage shall be given to the Owner. Three copies of the insurance certificate shall be furnished prior to the signing of the Contract. A complete policy will be furnished to the Engineer before the beginning of construction operations.

Failure to provide and continue in force, the property damage and public liability insurance during the life of this Contract shall be deemed a breach of the Contract and shall operate as an immediate termination thereof.

The aforesaid insurance shall be taken out and maintained at the Contractor's expense.

#### Article 45. Working Hours.

No laborer, workman, mechanic, foreman or inspector working within the Commonwealth, in the employ of the Contractor, sub-contractor, or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency. Any contractor or sub-contractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires.

#### Article 46. Rules for Employment of Labor.

The Contractor and all sub-contractors shall keep a true and accurate register of all mechanics, teamsters, chauffeurs and laborers employed thereon, showing the name, address, and occupational classification of each employee on said works, and the hours worked by, and the wages paid to each such employee, and shall furnish to the Massachusetts Department of Labor and Industries upon its request a true statement of the same. Such records shall be kept in such manner as the Commissioner of Labor and Industries shall prescribe, and shall be open to inspection by any authorized representative of the Department of Labor and Industries at any reasonable time and as often as may be necessary.

In the employment of mechanics, teamsters, chauffeurs, and laborers in the construction of public works by persons contracting or subcontracting for such works, preference shall first be given to citizens of the Commonwealth who have served in the army or navy of the United States in time of war and have been honorably discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the Commonwealth generally, and, if they cannot be obtained in sufficient numbers, then to citizens of the United States. Every employee in the work covered by the contract shall

lodge, board and trade where and with whom he elects, and neither the Contractor nor his agents or employees shall directly or indirectly require as a condition of employment therein that an employee shall lodge, board or trade at a particular place or with a particular person. Attention of bidders is called to Section 148 of Chapter 149 of the General Laws, and acts in amendment thereof which require the weekly payment of employees.

#### Article 47. Permits and Licenses.

The Contractor shall procure at his own expense all permits and licenses, pay all charges and fees and give all notices necessary and due in connection with the lawful prosecution of the work.

#### Article 48. Patented Devices, Materials and Processes.

Whenever the Contractor desires to use any design, device, material, or process covered by letters patent or copyright, the right for such use shall be secured by suitable legal agreement with the patentee or owner, and a copy of this agreement shall be filed with the Owner.

#### Article 49. Sanitary Provisions.

The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements of the Department of Public Health, local health officials or of other authorities having jurisdiction.

#### Article 50. Public Safety and Convenience.

The Contractor shall be responsible for the maintenance of traffic over, through or around the work included in his contract with the maximum of safety and practicable convenience to such traffic during the life of the contract, and whether or not work thereon has been suspended temporarily. He shall take all precautions for preventing injuries to persons or damage to property in or about the work. If the Contractor constructs temporary bridges or provides temporary crossings of streams, his responsibility for accidents shall include the roadway approaches as well as the structures of such crossings.

The work shall be carried on in such a manner as to provide safe passage at all times for public travel and with least obstruction to traffic. The convenience of the general public and of residents along and adjacent to the project shall be provided for in an adequate and satisfactory manner. The Contractor shall provide and maintain at his own expense (except as otherwise provided herein) in a safe and passable condition, such temporary by-passes and temporary bridges as may be necessary to accommodate traffic on and around the construction; and he shall provide and maintain, in a safe condition, temporary approaches to and crossings of intersecting highways.

Roads shall be closed to travel only as directed by the Engineer. Where the new construction coincides with the present traveled way, the Contractor shall so carry on his work that travel will not be obstructed.

The Contractor shall at all times so conduct the work that the abutters shall have reasonable access to their property as directed by the Engineer. When it is necessary to leave materials and equipment upon the highway they shall be placed so as to cause the least possible obstruction to pedestrians and other travel.

Work shall be carried on in such a manner as to provide for reasonable fire protection at all times.

When the work in any way affects the operation, management, maintenance, business or traffic on any railroad, such work shall be carried on in a manner satisfactory to the said railroad. The Contractor shall use all possible vigilance in order effectually to guard against all accidents or damages on the railroad due to his work, and the Contractor shall at all times during the progress of the work so manage and execute the same as to cause the least possible interference with the operation, management, business or traffic of the railroad.

In the event that the Contractor fails to comply with the provisions of this Article, then the Owner shall proceed to make such required improvements, detours, by-passes, etc., as he believes necessary. The Owner shall, at his own discretion, either proceed with said work immediately or after a suitable time limit specified in a notice to the Contractor. The cost of said work will be borne by the Contractor.

#### Article 51. Barricades, Warning Signs and Lights.

The Contractor shall at his own expense provide, place and erect all necessary barricades and warning signs and furnish and keep lighted all lights necessary to protect the work from traffic, pedestrians and animals. He shall also furnish at his own expense a sufficient number of watchmen at all times to protect the work.

Highways closed to traffic shall be protected by suitable barricades and warning signs, and the Contractor shall provide and maintain adequate lights and illumination therefor. He shall be held responsible for all damage to the work due to any failure of signs and barricades to protect the work properly from traffic, pedestrians, animals or other causes.

In the event that the Contractor fails to comply with the provisions of the Article, then the Owner shall proceed to make such required improvements, detours, by-passes, etc., as he believes necessary. The Owner shall, at his own discretion, either proceed with said work immediately or after a suitable time limit specified in a notice to the Contractor. The cost of said work will be borne by the Contractor.

#### Article 52. Protection and Restoration of Property.

The Contractor shall, at his own expense, preserve and protect from injury all property either public or private along and adjacent to the project, and he shall be responsible for and repair at his own expense any and all damage and injury thereto. He shall exercise special care during

his operations to avoid injury to underground structures such as water or gas mains, pipes, conduits, manholes, catch basins, etc. When necessary, the Contractor shall cooperate with representatives of public service companies in order to avoid damage to their structures by furnishing and/or erecting suitable supports, props, shoring or other means of protection.

Fire hydrants adjacent to the work at all times shall be readily accessible to fire apparatus and no material or other obstructions shall be placed within a radius of ten (10) feet of a fire hydrant.

Land monuments and property marks shall be carefully protected and if necessary to remove the same, he shall do so only at the Engineer's direction and after an authorized agent has witnessed or otherwise referenced their location. The Contractor shall not injure or remove trees or shrubs without proper authority. Insofar as possible the Contractor shall confine his movements and operations to the area within the limits of the location and the area outside the scope of the work shall not be disturbed except as directed.

#### Article 53. Responsibility for Damage Claims.

The Contractor shall take all responsibility for the work and take all precautions for preventing injuries to persons and property in or about the work; shall bear all losses resulting to him on account of the amount or character of the work, or on account of the weather elements or other causes, and the Contractor shall indemnify and save harmless the Owner and all of its officers, agents and employees against all suits, claims or liability of every name and nature, arising out of or in consequence of any acts of omission or neglect of the Contractor in the performance of the work covered by the contract and/or failure to comply with the terms and conditions of said contract, whether by himself or his employees or sub-contractors.

Damage to materials furnished by the Owner or damage to the Owner's property, either now existing or constructed under this Contract, and all loss or deterioration occurring prior to the final acceptance of the work, and resulting from the Contractor's operations, shall be made good by the Contractor at no expense to the Owner.

#### Article 54. Contractor's Responsibility for the Work.

Until its final approval by the Owner, the Contractor shall assume full charge and care of the work and he shall take every necessary precaution against injury or damage to the work by action of the elements, or from any cause whatsoever, whether arising from the execution or the non-execution of the contract. The Contractor shall bear all losses resulting to him on account of the amount or the character of the work, or because the nature of the land in or on which the work is done is different from what was estimated or expected, or on account of the weather elements, or other causes.

The Contractor shall rebuild, repair, restore and make good at his own expense, all injuries or damages to any portion of the work occasioned by any of the above causes before the completion of the work and the accep-

tance of the contract. Issuance of an estimate on any part of the work done shall not be construed as final acceptance of any work completed up to that time.

The Contractor shall reimburse the Owner for all expenses, losses or damages, as determined by the Engineer, incurred by or in consequence of any defect, act, omission, or mistake of the Contractor or his employees.

The Contractor will be held responsible for any and all claims for damage to underground structures such as water or gas mains, pipes, conduits, manholes or catch basins, due to his operations or to the operations of any of his sub-Contractors.

Locations shown for existing underground pipes and utilities are approximate only, as determined from records, M-Scope surveys and field observations. The Contractor shall have no claim if any utility or pipe-line is not shown in correct location or is present but not shown on the plans. The Contractor shall be responsible for notifying utility owners in reasonable advance of his work and he shall request of the utility owner, the staking out on the ground surface, of underground utilities and structure. The Contractor shall notify the Engineer, of any refusal or failure to stake out utilities after reasonable notice, and the Engineer and the Contractor will jointly take reasonable action to determine the location of the utilities before the beginning of excavation.

The Contractor shall contact all utility owners to determine if they have any buried pipes, cables, objects, etc. in the area of his work. Gas, Electric, gasoline, Telephone, Radio, water, Telegraph, oil, natural gas, Sewers, drains, fire alarm, ADT, etc. shall all be considered utilities herein.

#### Article 55. Claims Against Contractors.

The Contractor shall pay all bills for labor and materials contracted by him and for the rental of appliances and equipment hired by him for or on account of the work herein contemplated. The Owner may keep any moneys which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefore, to the payment of any expenses, losses or damages incurred by the Owner and determined as herein provided, and may retain, until all claims are settled, so much of the moneys as the Owner shall be of opinion will be required to settle (1) all claims against the Owner and its officers and agents as specified in Article 53 and 54, and (2) all claims for labor performed or furnished, for materials used or employed in such construction or repair, including lumber so employed which is not incorporated in the construction or repair work and is not wholly or necessarily consumed or made so worthless as to lose its identity but only to the extent of its purchase price less its fair salvage value, and for the rental or hire of vehicles, shovels, Excavating and Backfilling equipment rollers propelled by steam or other power, concrete mixers, tools and other appliances and equipment employed, said claims having been filed with the County Treasurer or City or Town Clerk, in accordance with Section 29, Chapter 149 of the General Laws, as appearing in the Tercentenary Edition, as amended by Chapter 361 of the Acts of the year 1938, and all subsequent amendments thereto, or the Owner may make such settlements and apply thereto any moneys retained under the contract. If the moneys retained under the contract are insufficient to pay the sum due under the claims for labor and materials and for the rental of appliances and equipment filed as aforesaid,



the Owner may, at its discretion, pay the same, and the Contractor shall repay to the Owner all sums so paid. The Owner may also, with the written consent of the Contractor, use any moneys retained, due or to become due under the contract, for the purpose of paying for labor and materials and for the rental of appliances and equipment for the work for which claims have not been filed as specified above. It is understood that the security required by Section 29 of Chapter 149 of the General Laws, Tercentenary Edition, is obtained both by the bond accompanying the contract and by the power of the Owner to retain and pay money under the provisions of this article, but the release of one shall in no way impair or discharge the other.

Article 56. No Waiver of Legal Rights.

Neither the inspection by the Owner nor any of its employees or agents, nor any order, measurement or certificate by the Engineer, nor any order by the Owner for the payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the Engineer or Owner, nor any extension of time, nor any possession taken by the Owner or its employees, shall operate as a waiver of any provision of the contract, or of any power herein reserved to the Owner or any right to damages herein provided; nor shall any waiver or any breach of the contract be held to be a waiver of any other or subsequent breach. Any remedy provided in the contract shall be taken and construed as cumulative, that is, in addition to each and every other remedy, herein provided; and the Owner shall also be entitled as of right to a writ of injunction against any breach of any of the provisions of the contract.

Article 57. Use of Explosives.

When the use of explosives is necessary for the prosecution of the work, the Contractor shall observe the utmost care not to endanger life and property, and whenever directed, the number and size of the charges shall be reduced. All explosives shall be stored in a secure manner and all such storage places shall be marked clearly "DANGEROUS - EXPLOSIVES," and shall be in the care of competent watchmen at all times. The method of storage and handling explosives and highly inflammable materials shall conform with all the State laws and regulations, as well as any local requirements.

Prior to blasting, the Contractor shall serve reasonable notice thereof to the operating official or company, or companies, leasing or owning pipes, conduits, poles, wires, etc., in danger of being injured by the blasting in order that a representative of said owner or lessees may be present at the site, and he shall take proper precaution to prevent such injury by the use of sufficient dunnage.

No blasting shall be attempted until sufficient warning has been given to all persons in the vicinity of the work.

The cost of additional bond or insurance, if any, required by the Owner and/or his agents, or by other duly authorized officials, shall be borne by the Contractor. No extra compensation will be paid the Contractor for the additional risk involved in blasting, for the additional cost of the extreme precautions required for safe blasting or for the additional cost of bonds or insurance required.

Article 58. Traffic Officers and Flagmen.

When in the opinion of the Owner it is necessary that special uni-

formed police be used to direct traffic, he may request the Contractor to obtain, in addition to the usual employees of the Contractor, a reasonable number of special uniformed police, and the Contractor shall obtain and furnish such men. These special uniformed police shall at all times be subject to the direction and control of the Contractor.

To reimburse the Contractor for this additional expense, the Owner will pay to the Contractor, in addition to the contract prices, the cost of such special uniformed police, such cost to include the actual wages paid by the Contractor to such police plus his expenses due to the requirements of the Federal Social Security Act, and the Massachusetts Unemployment Compensation Act and the cost of insurance required under Article 44 to insure said police as herein required.

The Contractor shall pay to any reserve police officer employed by him the prevailing rate of wages paid to regular police officers in such city or town. (C. 149 General Laws, Ter. Ed. as amended by C. 252 of the Acts. of 1939.)

When any work is being done by the Contractor which may obstruct the tracks of a railroad or in any way endanger the running of trains, a flagman or flagmen, designated by the Chief Engineer of the railroad shall be on duty for the protection of the property and traffic of the railroad.

The expense for all flagging service which is required shall be assumed by the Contractor and included in the prices bid for the various items for work to be performed under this contract.

#### Article 59. Temporary Use of Work.

Any portion of the work which is in an acceptable condition for use may be opened for use as directed and such opening for use shall not be construed as an acceptance of the work, or part thereof, nor shall it act as a waiver of any of the provisions of these specifications and the contract. The Contractor shall make at his own expense any and all necessary repairs or renewals to the work due to said opening for use under instructions from the Engineer, as well as to defective materials and work, natural causes, to ordinary wear and tear or otherwise, preceding completion and acceptance of the work. Completed sections of the work shall be maintained by the Contractor in an acceptable manner, until the final acceptance of the contract. He shall not permit use of any portion of the work unless so authorized by the Engineer.

### PROSECUTION AND PROGRESS

#### Article 60. Subletting or Assignment of Contract.

The Contractor shall give his personal attention constantly to the faithful prosecution of the work, shall keep the same under his personal control, and shall not assign by power of attorney or otherwise, or sublet the work or any part thereof without the previous written consent of the Owner and shall not, either legally or equitably, assign any of the moneys payable under this agreement, or his claim thereto, unless by and with the like consent of the Owner. He shall be responsible for the acts and omissions of his sub-Contractors, if any, and of all persons directly or indirectly employed by him or them in connection with the work.

The Contractor shall comply with the provisions of Section 179A of Chapter 149 of the General Laws, relative to giving such preference to citizens in awarding contracts for public work as is therein provided.

Article 61. Schedule of Operations.

Before commencing work, the Contractor shall, if required, submit a schedule of operations for approval by the Engineer. The schedule shall show the methods and order of operations that the Contractor proposes to use. The approval of the schedule by the Engineer shall not be construed as relieving the Contractor from any responsibility.

Article 62. Prosecution of Work.

The Contractor shall commence work within seven (7) calendar days after the execution of the contract, or within such other period as the Engineer shall authorize in writing, (approved by the Owner) at such points as the Engineer may direct, and he shall thereafter prosecute the work at such points and in such order as the Engineer may from time to time prescribe.

Should the prosecution of the work for any reason be discontinued, the Contractor shall notify the Engineer at least twenty-four (24) hours in advance of resuming operations.

It is the purpose of the Owner to complete the work in the shortest time possible and consistent with approved construction. To this end, Contractors will be required to use improved methods and equipment for doing the work and various parts thereof. All equipment shall be complete and well designed, and the organization shall be efficient and effective.

If, in the opinion of the Engineer, it is necessary at any time, the Contractor shall, when directed, employ such forces and equipment for one or more additional shifts as will be required to insure the proper completion of the work. The Contractor shall provide and maintain, including power or fuel, sufficient lights for the safety of his construction forces and to ensure the proper construction, inspection and prosecution of the work; in addition to any lights necessary to protect the work or the public. The Contractor shall not receive any compensation therefor in addition to the contract unit prices.

The Contractor shall work diligently and steadily on the work, and when ordered in writing by the Engineer to either begin work again or to increase personnel and equipment on the work to speed up progress, the Contractor fails so to do within 5 calendar days, the Contractor shall be considered to have abandoned the job and the Bonding Company shall be notified to complete the work or forces and equipment shall be engaged by the owner to complete the work as per conditions herein.

Article 63. Delay in Commencing Work.

The Owner may delay the commencing of the work, or any part thereof, if the Owner shall deem it best for its interests to do so. The Contractor shall have no claim for damages on account of such delay, but shall be entitled to an equivalent extension of time in which to complete the whole

or any portion of the work required under the Contract. The Contractor shall have no claim for damages on account of any delay on the part of the Owner in performing or furnishing any work or materials to be performed or furnished by the said Owner in connection with the execution of the work covered by the contract.

Article 64. Limitations of Operations.

The Contractor shall so limit his operations and carry on his work in such manner and sequence as to insure the least possible interference with traffic and abutters.

The Owner reserves the right to limit the prosecution of the work to such points and in such order as the Engineer may direct.

Article 65. Character of Workmen.

The Contractor shall employ only competent men to do the work, and whenever the Engineer shall notify the Contractor in writing that any man on the work is, in his opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory, such man shall be discharged from the work, and shall not again be employed on it except with the consent of the Engineer.

Article 66. Temporary Suspension of Work.

The Engineer shall have the authority to suspend the work wholly or any part thereof, for such periods as he shall deem necessary, because of unsuitable weather conditions, or failure to complete adjacent contracts, or to provide time for moving of utilities, or for such other causes as are considered unfavorable for the satisfactory prosecution of the work, or for such time as he may deem necessary due to the failure of the Contractor to carry out orders given or to perform any provision of the contract. Upon receipt of written order from the Engineer, the Contractor shall immediately suspend work or such part thereof in accordance with the order. No work shall be suspended without the written permission of the Engineer. The work shall be resumed when conditions so warrant or deficiencies have been corrected and the conditions of the contract satisfied as ordered or approved in writing by the Engineer. No allowance of any kind will be made for suspension of work by order of the Engineer, except for an extension of time equal to the period of suspension.

Article 67. Failure to Complete Work on Time.

On or before the date stated in the proposal for completion, the whole work shall have been performed in accordance with the terms of the contract. The time in which the various portions and the whole of the contract are to be performed and the work is to be completed is an essential part of the contract.

In case the work embraced in the contract shall not have been completed by the time stipulated therein (according to the foregoing requirements) the Contractor shall reimburse to the Owner a sum of money equal to the amount that the Owner is required to spend as a result of the delay in completion of the work. This amount shall include the cost of engineering and inspection on the work for the period of time overrun.

The Engineer is to constitute an adjudicator in regard to this Article of the Contract. He is to determine the cost or loss suffered by the Owner as a result of the delay in completion of the work.

Whatever the sum of money may become due and payable to the Owner by the Contractor under this article may be retained out of money belonging to the Contractor in the hands and possession of the Owner; and it is agreed that this article is to be construed and treated both by the parties to the contract and by all courts of law or equity, not as imposing a penalty upon said Contractor for failing fully to complete said work as agreed on or before the time specified in the Proposal, but as liquidated damages to compensate said Owner for all damages actually suffered because of the failure of the Contractor fully to complete said work on or before the date of completion specified in the Proposal.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, shall in nowise operate as a waiver on the part of the Owner of any of its rights under the contract.

#### Article 68. Annulment of Contract.

If the Contractor shall be adjudged a bankrupt, or if he shall make a general assignment for the benefit of his creditors, or if a receiver of his property shall be appointed, or if the work to be done under the contract shall be abandoned, or if the contract or any part thereof shall be sublet without the previous written consent of the Owner, or if the contract or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the Owner that the work, or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor has violated any of the provisions of the contract, the Owner may notify the Contractor to discontinue all work, or any part thereof; and thereupon the Contractor shall discontinue such work, or such part thereof as the **Owner may designate**, and the Owner may thereupon, by contract or otherwise, as it may determine, complete the work, or such part thereof, and charge the entire expense of so completing the work or part thereof to the Contractor; and for such completion the Owner for itself or its agents may take possession of and use or cause to be used in the completion of the work or part thereof of any such materials, animals, machinery, implements and tools of every description as may be found upon the line of said work. The Owner shall not be liable for any depreciation, loss or damage to said materials, animals, machinery, implements or tools during said use, nor until removed by the Contractor after completion of the work. Unless so removed within fifteen (15) days after mailing of notice so to do, they may be sold at public auction, after publication of notice thereof at least twice in any newspaper published in the City or Town, and the proceeds credited to the Contractor's expense subject to a lien for the storage charges.

If the engineer shall certify that the rate of progress is not satisfactory the Owner may, instead of notifying the Contractor to discontinue all work or any part thereof, notify him from time to time to increase the force, equipment and plant, or any of them, employed on the whole or any part of the work, stating the amount of increase required; and unless he shall within five (5) calendar days after any such notice, increase his force, equipment and plant to the extent required therein, and maintain and

employ the same from day to day until completion of the work or such part thereof or until the conditions as to the rate of progress shall, in the opinion of the Engineer, be fulfilled, the Owner may employ and direct the labors of such additional force, equipment and plant as may, in the opinion of the Engineer, be necessary to insure the completion of the work or such part thereof within the time specified, or at the earliest possible date thereafter, and charge the expense thereof to the Contractor. Neither the notice from the Owner to the Contractor to increase his force, equipment or plant; nor the employment of additional force, equipment or plant by the Owner shall be held to prevent a subsequent notice from the Owner to him to discontinue work under the provisions of the preceding portion of this article.

All expenses charged under this article shall be deducted and paid by the Owner out of any moneys then due or to become due the Contractor under the Contract, or any part thereof; and in such accounting the Owner shall not be held to obtain the lowest figures for the work of completing the contract or any part thereof, or for insuring its proper completion, but all sums actually paid therefor shall be charged to the Contractor. In case the expenses so charged are less than the sum which would have been payable under the contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expenses shall exceed the said sum, the Contractor shall pay the amount of the excess to the Owner upon completion of the work, without further demand being made therefor.

#### MEASUREMENT AND PAYMENT

##### Article 69. Measurement of Quantities.

The quantities of the various items of work performed shall be determined by the Engineer.

Upon the completion of the work and before final payment is made, the Engineer will make final measurement to determine the quantities of the various items of work performed, as the basis for final settlement. All measurements shall be made according to the United States standard units of measurements.

All materials which are specified for measurement by weight shall be weighed on standard scales furnished by and at the expense of the Contractor. Such scales shall be sealed at the expense of the Contractor as often as is necessary to insure their accuracy. A sworn weigher to be appointed and compensated by the Owner shall weigh all materials required to be weighed as above provided. If materials are shipped by rail or trucks, the car weights or quarry weights may be accepted, but scales shall be used as above, if so directed.

##### Article 70. Scope of Payments.

The Owner will pay and the Contractor shall receive and accept the compensation as herein provided, in full payment for the furnishing of all materials, labor, tools and equipment and for performing all work contemplated and embraced under the contract, also for all loss or damage arising out of the nature of the work, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encoun-

tered during the prosecution of the work and until its final acceptance by the Owner, and for all risks of every description connected with the prosecution of the work, also for all expenses incurred by, or in consequence of the suspension or discontinuance or the said prosecution of the work as herein specified, and for any infringement of patent, trade-mark or copyright, and for completing the work in an acceptable manner according to the plans and specifications.

The payment of any current estimate, or of any retained percentage shall in no way constitute an acknowledgement of the acceptance of the work or in no way or degree prejudice or affect the obligation of the Contractor, at his own cost and expense, to repair, correct, renew or replace any defects and imperfections in the construction of, or in the strength of, or quality of materials used in or about the construction of the work under contract and its appurtenances, as well as all damages due or attributable to such defects; which defects, imperfections or damages shall have been discovered on or before the final inspection and acceptance of the work. The Engineer shall be the sole judge of such defects, imperfections, or damages and the Contractor shall be liable to the Owner for failure to correct the same as provided herein.

#### Article 71. Payment for Increased or Decreased Quantities.

An increase in quantities of work to be performed (as set forth in Articles 3, 22 and 23) will be paid for at the contract unit price for the actual work done, in the same manner as if such work had been included in the original estimated quantities. No allowance will be made for anticipated profits or underruns in quantities.

Changes involving extra work will be paid for according to the method stipulated in the extra work orders.

#### Article 72. Omitted Items.

The Engineer may order omitted from the work any items or portions of the work found unnecessary to the improvement and such omission shall not operate as a waiver of any condition of the contract nor invalidate any of the provisions thereof, nor shall the Contractor have any claim for anticipated profit.

#### Article 73. Payment for Extra Work.

Extra work will be paid for in accordance with the accepted and approved extra work orders according to procedures outlined in Articles 22 and 23.

The determination of the Engineer shall be final upon all questions pertaining to the amount and value of extra work performed.

In making any change contemplated, the charge or credit for the change shall be determined by the Owner in one of the following methods prior to the issuance of the order for the changed work:

- (1) The order shall fix the total lump sum cost of the change in the work as mutually agreed on between the Owner and the Contractor and shall set out such cost as the amount to be added to or deducted from the contract amount by virtue of the change in the work. The cost as above shall include the Contractor's overhead and profit except that in any change which involves a net credit to the Owner, no allowance for overhead and profit shall be figured.
- (2) By estimating the number of unit quantities of each part of the work which is changed and then multiplying the estimated number of such unit quantities by the price (which price shall include the Contractor's overhead and profit) for a unit quantity thereof. Unit prices refer to unit prices bid herein. In the event there are no unit prices in the Proposal that are applicable, the Owner and the Contractor may work out a mutually agreeable unit price. The Engineer shall determine whether or not the unit prices in the Proposal are applicable to the extra work under consideration.
- (3) By ordering the Contractor to proceed with the work and to keep and present in such forms as the Owner may direct, a correct account of the cost of the change together with all vouchers therefor. The cost may include a lump sum allowance (fixed fee) for profit and overhead and 10%. The Contractor's labor costs may be increased by the cost of the various health, welfare and liability insurance he is required to carry. The Contractor's total actual cost may be increased by the cost of his Performance Bond.

In figuring changes, the instructions for measurement of quantities set forth in the Special Provisions and Specifications shall be followed insofar as possible. Items such as shovels, picks, small tools, manual equipment, melting pots, etc., shall be considered as part of the Contractor's overhead. Timekeepers, superintendents and office employees shall be considered as a part of the Contractor's overhead.

For machinery, trucks and equipment a standard rental allowance shall be charged. A reasonable rental allowance determined by the Engineer based on published rates and reasonable rental periods shall be used. If a piece of equipment used on extra work for a short period of time (hours or days) is on the job, or has previously been rented, for a long period of time (months) then the long term rental rate shall be used in determining costs.

In the case of any Extra Work ordered by the Owner and completed by a Sub-Contractor on the Project, the General Contractor will be allowed to increase the Sub-Contractor's cost to him by 5% to cover bookkeeping costs, overhead, etc. In determining costs, the Sub-Contractor is to use one of the three methods described herein above.

#### Article 74. Partial Payments

The Engineer shall, once in each month, make an estimate in writing of the total amount of the work done to the time of such estimate and the value thereof. The Owner shall retain ten per cent (10%) of such estimated value as part security for the fulfillment of this contract by the Contractor, and shall pay monthly to the Contractor while carrying on the work the



balance not retained as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provision of this contract.

No such estimate or payment shall be required to be made when, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the contract, or when in his judgment the total value of the work done since the last estimate amounts to less than three hundred (300) dollars.

The Owner may, if it deems it expedient so to do, cause estimates to be made more frequently than once in each month, and it may cause payments to be made more frequently to the Contractor. The Owner may at its option retain, temporarily or permanently, a smaller amount than as aforesaid, and may cause the Contractor to be paid, temporarily or permanently, from time to time such portions of the reserves as it deems prudent.

The Owner may also allow partial payment on such materials and/or items delivered on the site of the work but not considered as erected or complete in place (for which the ordinary payment as specified above would place) but for which, in the judgment and opinion of the Engineer, the Contractor shall be allowed a partial compensation, due to the fact that the scheduled completion of such materials and items has been hindered and delayed by either temporary closing of the project or by such other causes over which the Contractor has no control. The amount of such partial payments will be determined by the Engineer but in no case shall it exceed seventy per cent (70%) of the contract unit price.

The Owner may increase the retained percentage as security for claims or costs incurred under Articles 55, 62, 67 and 68 or any other section of the Contract.

#### Article 75-A. Acceptance and Final Payment.

The Engineer shall, as soon as practicable after the satisfactory completion of the contract, make a final estimate of the amount of work done thereunder and the value of such work, and the Owner shall, within sixty-five (65) days from and after the day the work has been approved by the Owner, forward to the Contractor a copy of the final estimate together with an agreement form for his acceptance. After such acceptance has been filed with the Owner payment of the entire sum will be made, so found to be due thereunder after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the final estimate and payment.

#### Article 75-B. Final Cleaning up of Job.

On completion of the work to be done under this Contract and before final acceptance of the work, the Contractor shall clean up the job, so that the condition of the site will be at least equal to its condition before the work began.

If necessary, the Contractor shall spade up or harrow all trench surfaces and grade and rake same, clean up all papers, trash and stones and leave premises broom clean.

The Contractor shall make good any defect discovered on any of the pipelines, valves or castings, as well as hydrants and hydrant branches that become evident within one (1) year of the date of acceptance of the work by the Town. The cost of repairs necessary shall be borne entirely by the Contractor. This same guarantee applies to the excavation and backfill of trenches, to pavement areas, road shoulders, lawn areas, etc.

Article 75-C. Section 39F of Chapter 30. (Chap. 677 Acts 1956).

Within ten days after the general contractor receives payment on account of a periodic estimate of the value of the work done, he shall pay to each subcontractor the sum contained therein for the value of said subcontractor's work, less any amount retained therefrom by the awarding authority under the terms of the general contract or in consequence of any legal proceedings or statutory liens, and less any amount due the general contractor under the subcontract. Not later than the sixty-fifth day after each subcontractor fully completes his portion of the work in accordance with the plans and specifications, the entire balance due under the subcontract shall be due the subcontractor and shall be paid to the general contractor by the awarding authority for the account of the subcontractor and in partial payment of the amount due under the general contract; provided, however, that the awarding authority may withhold from such partial payment all amounts retained by the awarding authority pending its determination that said portion of the work is satisfactory or in consequence of any legal proceedings or statutory liens. The general contractor shall forthwith pay to the subcontractor the full amount received as aforesaid from the awarding authority for the account of such subcontractor less any amount due the general contractor under the subcontract; and the awarding authority may take such steps as it may deem necessary to arrange that such amounts are paid by the general contractor to the subcontractor forthwith. If, within ten days after the aforementioned sixty-fifth day, the subcontractor has not received from the general contractor the entire balance due on the subcontract less the aforesaid amounts, the subcontractor shall give the awarding authority and the general contractor written notice of such failure to receive payment and of the amount so payable, but not paid, by the general contractor. Thereupon the awarding authority shall make, out of sums payable to the general contractor on the general contract, direct payment to the subcontractor of the entire balance due on the subcontract less the aforesaid amounts. Such direct payment by the awarding authority to any subcontractor and any payment to a general contractor for the account of a subcontractor as hereinbefore provided shall discharge the obligation of the awarding authority to the general contractor to the extent of such payment.

Article 75-D. Contractor's Responsibility; Patents, Equipment, etc.

"The Contractor shall save and hold the Owner harmless from all loss, cost, damage or expense that it may be put to by reason of any alleged infringements of any patent, or patents, covering the manufacture, installation or use of any part of the apparatus or equipment, or any machinery or mechanism or part of thing installed or used, or installed for the purpose of use in the work hereinafter contemplated. The Contractor does further agree that the

Owner shall not be disturbed in the use or operation or installation of the work or equipment herein contemplated by litigation based upon such alleged infringements, and the Contractor does hereby further agree that at its own expense it will defend any and all suits or proceedings for infringement, or otherwise, that may be brought or instituted by any party, persons, companies or corporations against the said Owner for alleged infringement or infringements of any patent or patents. Notice of such action or of any action under infringement proceedings shall be served on the Contractor at its address in writing by registered mail by the Board. Said Contractor shall then be required, through counsel to assume the defense of and to defend same at his own expense."

**SPECIAL  
PROVISIONS**

**HAMPDEN COUNTY  
APPROVED**

OCT 23 1957

*William F. Harkness*  
*Thomas F. Sullivan*  
*Reginald Walsh*  
County Commissioners



**TIGHE & BOND  
CONSULTING ENGINEERS  
HOLYOKE, MASS.**

## SPECIAL PROVISIONS

Article 76 Scope of the Work The general outline and details of the proposed work are shown on a set of plans containing sheets and entitled:

"REPAIRS TO  
BEMIS POND DAM  
PLAYGROUND COMMISSION  
CHICOPEE, MASS.

Tighe & Bond, Consulting Engineers  
Holyoke, Mass.

Scale: as shown June, 1957"

Further details of the work and the various items and proposals required in the work will be found in the General Requirements, Special Provisions, Standard Details, and the Plans, all of which are a part of the contract document.

The Contractor is to furnish all plant, labor, materials, equipment, supplies, insurance and other factors necessary or proper for the carrying out of the work contemplated under this contract. Work performed and the materials furnished are to be in strict accordance with the applicable plans and specifications and addenda.

Work consists of furnishing all labor, tools, equipment and materials necessary to construct a reinforced concrete discharge conduit thru the dam, and a drop-inlet type spillway or intake structure, and to repair and improve the concrete walls forming the present spillway and footbridge abutments, and to restore the earthen dam, all as shown on the plans and as described in detail herein.

Article 77 Proposal Guaranty Bidder is to furnish with his proposal a certified check or cash in the amount of \$1,000 drawn upon a bank or trust company in the Commonwealth of Massachusetts and payable to the City of Chicopee, Massachusetts.

Article 78 Contract Bond The successful bidder is to furnish to the owner a performance and a labor and materials payment bond in the full amount of the contract for the faithful performance and full payment of all the work required or labor and materials furnished under this contract.

Article 79 Insurance Requirements In accordance with Article 44 of the General Requirements, the Contractor is to furnish the following insurance:

Public Liability	\$100,000-\$300,000
Property Damage	\$25,000-\$50,000

The Contractor is warned to read carefully and to have his insurance company read carefully the provisions of Article 44, which must be complied with.

Article 80 Special Conditions      The Contractor's attention is called to the following:

1. Work under this contract is to be substantially completed so as to permit the storing of water within 60 calendar days from the date of award of the contract.
2. The proposal has been divided into three (3) lump sum items and several unit priced items and each item is to be considered as a complete unit in itself without relation to the other items. The Contractor is warned not to unbalance his bid, and that the City may increase, decrease, or delete completely any of the items, in which case the Contractor shall not be entitled to any change in his unit prices, nor to any consideration or payment for profits which he may have anticipated for items deleted.
3. The entire area in which work is to be carried out under this contract shall be closed to pedestrian traffic. The Contractor shall erect and maintain neatly painted fences across the present walk-way with signs indicating that the area is closed. Such fences shall be permanently erected before work is begun, and shall be maintained by the Contractor until all work has been completed. Fences shall be of a style approved by the Engineer. Lights shall be maintained at each fence during all hours of darkness. A gate equipped with a lock may be included in the fence, to provide access to the area. The gate shall be kept securely locked by the Contractor at all times when the gate opening is not required for access to the work area.

Neatly painted and lettered signs shall be erected and maintained by the Contractor at one location on each side of the work designated by the Engineer to warn pedestrians that the walk-way across the dam is closed.

4. There is a brook, which drains the upstream area, that flows thru the project site. The Contractor at all times shall provide for this flow thru the work, and he shall anticipate flood flows which could greatly increase the flow in this brook. Expressly included in Item 1 is any work required for the proper control of the brook and or ground water. The control shall be basically obtained thru the installation of a temporary pipe. The Contractor shall advise the Engineer, in advance of starting work, the method he proposes to use for this purpose, and only a system satisfactory to the Engineer shall be used.

The Contractor shall exercise unusual care to protect the earthen base upon which structures are to be placed from washing out or from being softened by excess water, and in the event washouts or excess softening of the material occurs, the Contractor shall restore the base so disturbed in a manner prescribed by the Engineer without additional compensation.

Article 81 Material Furnished by the Owner      No materials will be furnished by the Owner for this project.

The Contractor may re-use material excavated from the existing earthen dam, provided that all stones exceeding six (6") inches in their largest dimensions; top-soil and vegetation including stumps or roots; and all concrete and bricks are removed before placing the material in sections of the embankment not requiring Impervious Fill.

Excess materials such as earth, pipe, valves, etc., or material not suitable for re-use in the embankment shall become the property of the Contractor and shall be disposed of by him.

Article 82 Engineering Services      The Contractor shall be furnished required lines and grades for the construction of the culvert and inlet works, the 16" drawdown pipe, and for the alterations to the existing spillway and bridge walls.

The slope lines for the embankment shall match the existing slopes, and the Engineer shall be the sole judge in determining the acceptability of the slopes.

The Contractor shall protect all of the Engineer's stakes and markings and he shall not remove any of them without prior approval of the Engineer. In case any of the Engineer's stakes or other markings are removed or disturbed during the progress of the work, such stakes or markings shall be replaced by the Engineer, and the Owner may deduct the cost of making such replacements from payments due the Contractor under the terms of the Contract.

## ITEM 1

### Construction of Intake & Discharge Conduit & Restoration of Dam

Article 83A Work Included Work included under this item is the furnishing of all labor, tools, material and equipment required to construct, ready to use, the intake structure, the discharge conduit, and the re-alignment of the existing 16" cast iron drawdown pipe and the furnishing and installation of a sluice-gate and appurtenances. It also includes all excavation required for constructing the above items and the restoration of the dam where such excavation is carried out, and the debris pins and sleeves in the wiers.

It does not include the access bridge and steps extending from the top of the embankment to the intake structure, which are included under other items.

It does not include riprap and excavation for riprap.

It does not include the repairs and alterations to the existing footbridge abutments and overflow spillway walls which are included under applicable items.

This item includes all work described in detail below in Articles 83B to 83-0 and any other work required for or incidental to providing an intake structure, discharge conduit, and drawdown pipeline complete and ready to use.

Article 83B Preparation of Site The Contractor shall prepare the site for his operations by carrying out the following items:

1. Erect protective fences and signs at least 50' east and west of the limits of the work, as required in Article 80, Paragraph 3.
2. Remove the chain link fence at the top of the dam embankment for a distance of approximately 50' each side of the centerline of construction.
3. Remove and dispose of an 18" maple tree located approximately 8' left of station 0+93.
4. Clean out the intake chamber at the upper end of the existing 16" drawdown line.

Article 83C Excavation Included under this item is all excavation required for the construction of the intake structure, the discharge conduit and for the re-alignment and reconstruction of the existing 16" drawdown pipe.

Excavation shall be divided into two classes--namely,

1. open excavation from the top of the existing embankment to elevation 114.0, and
2. trench excavation within sheathing from elevation 114.0 to the



bottom of the various structures. Special care shall be used in excavating for the seep rings and for the cut-off at station 0+95, both of which are to be poured against undisturbed earth.

Materials to be reused in the construction shall be stored in the pond area in accordance with the requirements of Article 83K, paragraphs 3 and 4.

Surplus materials or materials unsatisfactory for re-use in the structure shall become the property of the contractor and shall be disposed of by him in a manner satisfactory to the Engineer.

This item also includes the necessary excavation for re-aligning and reconstructing the existing 16" drawdown pipeline.

The open cut shall be carried out in such a manner that all slopes shall be not sharper than  $1\frac{1}{2}$  horizontal to 1 vertical.

This item does not include excavation required for placing riprap nor excavation required in repairing and altering the existing footbridge abutments and overflow spillway walls, which work is included in other items.

Article 83D Rock Excavation No appreciable amount of rock excavation is anticipated on this project. For that reason no item has been set up for such excavation. Removal and disposal of boulders is to be considered as excavation required under Item 1.

Article 83E Sheathing Included under Item 1 is the furnishing, installing and removal of sheathing from elevation 114.0 to grades sufficiently below the bottom of excavations to prevent boils or blow-up of the bottom of trenches.

Sheathing may be either tongue-and-groove wood sheathing or interlocking steel sheathing. It shall be the Contractor's responsibility to design and provide a system of sheathing and bracing that will adequately protect the work being done; however, his design shall in every case be subject to the approval of the Engineer. The Engineer's opinion concerning the safety and stability of the method of sheathing and bracing used or proposed shall be final and in every case binding on the Contractor.

1. Methods of Construction After excavation has been carried to elevation 114.0, the Contractor shall drive sheathing ahead of excavation. The Contractor shall drive the sheathing into the soil beyond the limits of excavation a distance sufficient to prevent boiling or upheaval in the trench bottom.

Where it is necessary to carry braces thru the barrel of the discharge conduit or the walls of the intake structure, forms shall be boxed out so as to provide at least 3 inches clearance around the braces. After removing the sheathing, holes in the

walls shall be closed by bricking in with solid brick walls. Reinforcing steel shall not be cut thru such openings and bars which normally fall within the opening shall be enclosed in the brickwork.

Upon completion of the work, the sheathing and bracing system shall be carefully and completely removed so as to prevent any settlement of the material adjacent to the trench. The trench shall be backfilled and the material therein well compacted to the level of the bracing before the wales and braces are removed. Trenches shall be filled in progressive steps until the backfilling has reached the level of the uppermost set of wales and braces. When the backfill has reached this level, the sheathing may be pulled and the voids left in pulling the sheathing shall be filled in a manner satisfactory to the Engineer. In General, filling of these voids shall be accomplished by sluicing sand and gravel into the voids using a high pressure hose. The sheathing shall extend from station 0+2.5 to station 0+95 with an end closure at station 0-2.5.

Article 83F Discontinuance of Existing Conduit thru Dam  
Included under Item 1 is the breaking out and plugging of the existing masonry conduit thru the dam, including any or all excavation required to accomplish the complete discontinuance of this line.

1. Construction Methods Before discontinuing the existing conduit, the contractor shall provide a system for temporarily handling the flow of the brook as required below and in Article 80, Paragraph 4, above. After the temporary system has been installed, the contractor shall break out the top of the existing masonry culvert excepting at seep rings and at the cutoff where he shall break out the entire barrel of the conduit. He shall exercise special diligence and care to preserve the bottom section of the conduit. All brick, earth and other debris shall be completely removed from the sections of conduit left in place, and these sections shall then be filled with concrete meeting the requirements of Article 83G excepting that it shall be 2,000-lb 28-day strength.

The existing overflow manhole shall also be completely removed to a level just below the bottom of the floor for the proposed discharge conduit, and after removing all bricks, earth and other debris from the manhole, it shall be filled with 2,000-lb concrete.

Care shall be exercised to keep the top of the concrete fill in these structures below the grades for the proposed discharge conduit.

After the concrete fill develops sufficient strength in the opinion of the Engineer, the subgrade shall be neatly graded to the proper elevations for the construction of the discharge

conduit. The subgrade shall be compacted as may be required by the Engineer.

Article 83G Concrete - Work Included All concrete work that is to be done under this contract shall meet these specifications.

1. General It is the intent of these specifications to secure, for every part of the work, concrete of homogeneous structure which when hardened, will have the required strength and resistance to weathering and disintegration. To this end, the requirements hereinafter specified must be met. Standard tests of the cement, aggregates, concrete and reinforcement will be conducted by the Engineer. The Contractor shall furnish the material for all required samples and labor as requested for obtaining samples. The Contractor agrees to accept as final the results of tests secured by testing laboratory engaged by Owner.

2. Concrete shall have a compressive strength at 28 days of at least 3,000 pounds per square inch, excepting that used for filling the existing culvert and manhole which shall have a compressive strength at 28 days of at least 2,000 pounds per square inch.

For 3,000# concrete: Min. Cement Content = 5.6 bags per cu. yd. of concrete  
Maximum = 6.25 gals of water per bag of cement including water content in aggregate  
Consistency Range in slump inches = 2-4

3. Portland Cement The Contractor shall furnish Portland Cement of the quality herein specified in sufficient quantity for the work required. All cement furnished for concrete in a given structure shall be of the same type and color so as to avoid variations in the color of the finished exposed concrete. Cement furnished shall be dry, free of lumps, and of a uniform blue-gray coloring. Cement shall meet the requirements of the A.S.T.M. specifications C150-53, Type 2 or Type 3. All cement shall be air-entraining.

4. Fine Aggregate The fine aggregate shall consist of sand composed of grains or particles of quartz or other hard and durable rocks, the surfaces of which are not coated with any foreign material nor worn smooth. The grains shall be moderately sharp, free from soft, decomposed or partly decomposed sand grains, free from soft, decomposed or partly decomposed sand grains, lumps of clay or ferruginous cemented sand, mica, loam, sea salts, organic matter or other foreign materials. If the fine aggregate is washed it shall be allowed to stand at least twenty-four (24) hours in piles after being washed before being used if so directed. The sand shall be well graded from coarse to fine and when tested by means of square mesh laboratory sieves shall meet the following requirements:

Passing 1/4" sieve - 100%  
 Passing #4 sieve - 95% to 100%  
 Passing #20 sieve - 30% to 75%  
 Passing #50 sieve - 5% to 28%  
 Passing #100 sieve - not more than 8%  
 By elutriation test- not more than 3%

5. Coarse Aggregate Coarse aggregate shall consist of crushed stone or screened gravel conforming to the following requirements: Crushed stone or screened gravel shall consist of clean, hard, durable and impermeable particles, resistant to wear and frost and free from injurious amounts of organic matter, loam, clay, silt salts, mica and structurally weak particles. The particles shall be relatively round in shape and with gritty surfaces. Gravel shall be washed until the surfaces are clean and free of dust and surface coatings. Crushed stone shall be washed if the surfaces are coated with dust.

6. Grading of Coarse Aggregate When tested by means of square mesh laboratory sieves, coarse aggregate shall meet the following requirements:

NOMINAL SIZE	PER CENT BY WEIGHT PASSING THROUGH			
1-1/2	1-1/2	3/4	3/8	#4
	95-100	30-60	5-20	0-5

7. Water Water for use with cement shall be clean, clear and free from deleterious amounts of oil, acid, alkali, salts and organic matter.

The water shall exhibit no deleterious effect upon the strength, setting or soundness of the cement.

8. Forms Approved forms shall be provided and used by the Contractor. The forms shall be in good condition, clean and properly treated to give the concrete a smooth even finish. They shall be constructed of T&G lumber, metal, plywood or composition facing and shall be sufficiently rigid so that they can be constructed and braced true to line and grade.

Forms shall be left in place until the concrete is sufficiently hardened and has attained a reasonable percentage of its final strength. Both before and after the form removal, proper attention must be paid to the moist curing of the concrete.

The Engineer will require that the Contractor use ties that can be broken off within the wall and the resulting hole plugged with a grout containing an admixture to prevent shrinkage.

9. Mixing All concrete used on this job is to be furnished by a transit-mix company from the metropolitan area, having a reasonable background in this business. The concrete is to be delivered to the job site in the transit-mix trucks in an unmixed condition. After arrival at the job site, the cement and aggregates

are to be dry-mixed for thirty seconds and wet-mixed for at least four minutes, before placing in the forms.

Concrete shall be mixed in such quantities and at such times that any truck load can be placed in the forms within thirty minutes after the addition of water. No retempered concrete is to be used. No water is to be added to the trucks after prolonged mixing in order to retard initial set. No concrete is to be used that arrives on the job site already mixed.

10. Placing Concrete The forms shall be properly cleaned and wetted prior to the placing of concrete. All imbedded items are to be properly protected. All reinforcing is to be in proper condition and in the correct location. If the pour is to be made against existing concrete, the surface of the existing concrete shall be prepared as described in Article 83G-11.

Concrete shall be placed in a manner to prevent stone pockets, voids or segregation. Concrete shall not be dropped, flowed or dragged more than seven feet in the forms. Concrete shall be properly distributed and re-mixed in the forms with shovels, rods and vibration.

The Contractor will be allowed to use mechanical vibrators of a type and number approved by the Engineer. The use of the mechanical vibrators shall not eliminate the rodding of the concrete at the face of the forms.

In addition to steel reinforcement there will be built into, or set or attached to the concrete, pipes, anchors or other metal objects as shown on the drawings or ordered. All necessary precautions shall be taken to prevent these objects from being displaced, broken or bent. Before placing concrete, care shall be taken to determine that any embedded parts are firmly and securely fastened in place as indicated. They shall be clean and free of paint, rust, oil or any other coating or foreign matter. Concrete shall be packed tightly around pipes and other metal work so as to prevent leakage and secure perfect adhesion. Pipes shall be adequately protected from intrusion of concrete into them.

11. Joints Only the construction joints called for on the plans will be allowed except on approval of the Engineer

All horizontal construction joints are to be treated as follows. After pouring of the concrete and after initial set of the concrete has taken place, the construction joint is to be cleaned off with a jet of water or a jet of air and water mixed. The jet shall have sufficient force to clean off all loose concrete, scum and latence. The jet shall expose and clean off aggregate but shall not undercut or loosen the aggregate.

Before pouring new concrete against concrete already in place and hardened, the surface shall again be cleaned with a water jet. The exposed aggregate shall then be mopped with a mortar composed of the same proportions of sand and cement as is in the concrete. The mortar shall be placed and mopped in place immediately prior to the placing of concrete and shall not have set up or hardened prior to the placing of concrete.

The Construction joint located between the discharge conduit and the intake structure shall be coated with coal tar mastic before pouring adjacent section.

12. Protection of Concrete and Curing The Contractor shall protect the concrete from damage by rain, sun, frost, or underground water during and after placing, until properly cured and hardened in a manner satisfactory to the Engineer. The concrete shall be kept fully saturated and protected against any drying action by an approved method of curing for not less than seven days. When temperatures are 40° or lower, or when it appears temperature will drop below 35° within 24 hours after pouring, calcium chlorida shall be added as directed by the Engineer. This shall not affect the requirement for heating.

13. Finishing Concrete work will be finished as follows:

- (a) Floors will be steel trowelled
- (b) Exposed side walls and ceiling of conduit and intake are to have all raised fins removed and rat holes filled and patches rubbed to a smooth and even finish.
- (c) Top of roof of conduit is to be screeded and wood floated to an even surface without additional finishing.
- (d) Exposed exterior walls, posts and beams shall be rubbed with carborundum stone to a smooth uniform finish. No cement shall be added to the surface while rubbing; the finish shall be obtained by wet rubbing of the green concrete only.
- (e) All form ties are to be broken off within the concrete and the resulting holes plugged with non-shrink grout.

Immediately after the removal of the forms, the work shall be inspected and defective work corrected. If the surface of the concrete is bulged, uneven, shows excessive voids, or has other markings which cannot be repaired satisfactorily, the entire section shall be removed as directed by the Engineer and replaced with satisfactory work; all such removal and replacement work to be done at the expense of the Contractor. If the work is satisfactory, the minor repairs required are to be completed immediately and the required rubbing is to be done as soon as the concrete can be properly worked.

The Engineer shall be the sole judge of the satisfactory quality of the work completed. He shall determine as to whether the concrete is so poorly placed as to require removal or whether proper corrective work can result in a satisfactory job.

14. Inspection The Engineer reserves the right to inspect the forms, reinforcing, etc., prior to the placing of concrete. The Contractor will be required to place one side of the wall forms and the reinforcing steel and shall give the Engineer reasonable notice to allow for inspection of the various features. Upon completion of forming and immediately before placing of concrete, the Engineer shall again be given reasonable notice to allow for final inspection. The Engineer will then give written approval for the placing of concrete for that portion of the work.

Article 83H Reinforcing Steel Work Included All reinforcing steel used on this project shall meet these specifications:

1. Materials Reinforcing steel used on this job shall be rolled from new billets. It shall be intermediate grade structural steel. Reinforcing shall conform to ASTM Specification A-305.

2. Cutting and Bending. All bars shall be shop cut and bent and shall arrive on the job ready for use. All bars shall be clean and free of rust, oil, grease and other deleterious matter when delivered to the job and shall remain in that condition until incorporated in the completed structure. Bars shall be bent in accordance with bending schedule hereto attached.

The Contractor shall submit to the Engineer detailed plans and schedules of the reinforcing.

3. Placement Steel shall be placed in the exact positions and with the spacing shown on the drawings or ordered by the Engineer. It shall be so fastened in position as to prevent being displaced during the placing of concrete. A correct distance between parallel rods shall be not less than the diameter of these rods. Where splices in reinforcement in addition to those indicated are necessary, there shall be sufficient lap to transfer by bond the stress in the bar. Rods shall be lapped not less than 40 diameters. Lapped ends of rods shall be sufficiently separated or properly connected together in such a manner as to develop the full strength of the rod.

All reinforcement shall be firmly supported by the use of metal bars, spacers, seats or anchors. The use of wood blocks is prohibited. The use of wire ties to hold the steel in correct relationship to the forms should be kept to a minimum. All reinforcement shall be placed on the day prior to the placement of concrete and in no case will the Contractor be allowed to place concrete without the Engineer's approval of the placement of the reinforcing.

Article 83-I Remove and Re-lay 16" Cast Iron Drawdown Pipe

Work Included The Contractor shall remove the 16" gate valve and extension stem located in the overflow manhole, and sufficient of the 16" Cast iron drawdown pipe to permit relaying the line to the alignment shown on the plans. The Contractor shall do all trench excavation and backfill and furnish all pipe, fittings, couplings and specials required to re-align and connect the drawdown line to the proposed intake structure. The existing pipe shall be removed from a point approximately 18 ft. south of station 0+00 to the existing overflow manhole, or to such a distance as required by the Engineer in order to obtain satisfactory alignment and connection.

1. Construction Method After completing excavation for the discharge conduit to elevation 114, the existing 16" cast iron drawdown line shall be exposed to at least 22 ft. south of station 0+00. The exact alignment and location of fittings will then be determined by the Engineer. The Contractor shall then install the new connection to the intake structure continuing the brook flow thru the existing line, until such time as provisions have been made for carrying the brook flow thru the proposed discharge conduit location. Flow thru the existing drawdown line shall not be discontinued until satisfactory arrangements have been provided for temporarily handling the brook flow.

The trench around the pipe and that from which the pipe is removed shall be carefully backfilled with selected hand-placed material. Material under, around and for 1 ft. over the pipe shall be hand tamped with railroad tamping irons and hand tampers. Material above that level shall be firmly compacted with pneumatic or other approved mechanical tampers.

The contractor shall construct any dams necessary for the control of water and shall provide all pumping and bailing necessary to provide satisfactory conditions for installing the pipe.

2. Materials Fittings shall be 16" cast iron flanged fittings, Class D style, as indicated on Plan.

Pipe shall be A.W.W.A. Class D flanged cast iron pipe.

Couplings required shall be Dresser Style 53, cast iron couplings.

Article 83J Control of Water Work Included The Contractor shall provide a temporary means of handling the brook flow, ground water and storm run-offs during the construction period, and this work is expressly included as part of this item, payment for which shall be included in the unit price for Item No. 1.

1. Construction Methods The control of water shall be accomplished basically by the installation of a temporary conduit or sluiceway running thru the location for the new discharge conduit, and pumping and bailing as required.



The Contractor shall advise the Engineer, in writing, before starting work, relative to the system he proposes to use for controlling water and only a system meeting the approval of the Engineer shall be used.

The system used must be relatively watertight, and under no circumstances shall water be allowed to flow thru the work in such quantities or in a manner which will disturb or soften material upon which structures are to be constructed.

Reference is made to Article 80, Paragraph 4.

All concrete shall be poured "in the dry", and the contractor shall do all work required to obtain and maintain satisfactory conditions at all times.

Article 83K Restoration of Dam      Work Included      Included under  
Item 1 is the restoration of the dam where it is breached during construction. Item 1 includes furnishing, placing, compacting, shaping and grading of the various classes of fill, fine sand, broken stone, bank run gravel and loam required to restore the dam as required and shown in detail on the plans.

1. Materials

(a) Fill. There are four different zones in the dam, each requiring a different material. The central portion of the dam designated "Impervious Core" shall consist of the most impervious material available, and shall be borrow furnished from outside the site by the contractor. The downstream section of the dam shall consist of selected material excavated from the existing dam and shall consist of granular pervious material unless borrow is ordered by the Engineer in accordance with Article 83K-3. The upstream section of the dam shall consist of semi-pervious material, taken from material excavated from the existing dam. The upstream face of the dam shall be covered with clean, sharp sand or fine washed gravel (commonly called grits).

2. Impervious fill Under Item I, the Contractor shall furnish sufficient acceptable impervious fill from outside the project site for the construction of the impervious core in the location and to the cross-section shown on the Plan. Payment for all impervious borrow furnished shall be included in the lump sum price for Item #1. This material shall consist of selected, impervious soils consisting of a mixture of sand, gravel and clay containing not less than 30% nor more than 60% of material passing a No. 200 mesh sieve. The material shall be of a semi-cohesive nature.

3. Pervious Fill Pervious fill shall consist of the more granular material removed from the present dam embankment. While excavation of the dam is being done, material suitable for pervious fill shall be separated from other materials and stored separately.

In the event that material removed is not satisfactory in the opinion of the Engineer for pervious fill, the Contractor when so ordered by the Engineer in writing shall furnish borrow for the downstream portion of the dam. Material furnished for this purpose shall be a granular, non-cohesive, free-draining material comprised mostly of sharp sand and gravel. It shall be essentially free of clay.

Refer to Article 83R below for method of payment when previous borrow is furnished by the Contractor.

4. Semi-Pervious Fill shall consist of selected material excavated from the existing dam embankment, stored in the pond area, and replaced in the upstream section of the dam. All stones larger than 6" in their largest dimensions, concrete or brick-bats shall be removed from material to be placed in the dam.
5. Sand Blanket on Upstream Face The contractor shall furnish and place the two-ft. thick layer of sand on the upstream face of the dam as shown on the plans. This material shall consist of clean sharp sand or fine gravel. Generally speaking, a suitable material can be found "bank-run" in most gravel pits, provided material is selected that is practically free of stones. The material shall be practically free of organic matter, roots, sod, wood or other deleterious materials.
6. Broken Stone Fill In order to control wave action and prevent erosion of the newly placed fill on the upstream face of the dam, the Contractor shall place an eight inch (8") thick layer of 2" crushed stone or washed gravel between elevation 124.3 and 132.0 on the upstream face of the dam. This stone shall replace an equal volume of sand from the sand blanket required under Article 83K-5.
7. Prior Approval Required for Borrow No borrow materials shall be incorporated in the dam embankment until the Engineer has approved the source of material. The Contractor shall advise the Engineer on the source of borrow he proposes to use and shall furnish the Engineer upon request with representative samples.
8. Weather conditions Weather conditions will control the placement of embankment material to a great extent.  
  
No frozen material is to be incorporated in the embankment.  
  
All material incorporated in the embankment is to be at its optimum moisture level and material not meeting this requirement shall not be used. Any material already in place that becomes soft, muddy or saturated due to rain or flooding shall be removed from the embankment.
9. Construction Methods The surface of material remaining in the dam embankment shall be prepared to provide proper

bond between the old material and new fill, by loosening the surfaces either by power scarifying or by hand picking. Surfaces shall be loosened to a depth of at least four inches (4") before placing new fill on them.

Material in the main portion of the dam is to be placed so that the top of the dam along its longitudinal axis is maintained practically level. Placement of impervious fill under Par. 2 shall be kept slightly ahead of the other material so that the top of the dam shall always have a small, free-draining hump in it.

Material shall be placed in layers of not more than 8 inches measured loose and each and every area shall be compacted by at least two passes of the treads of a heavy (D-8 or equal) dozer. Trucks shall be diverted over the newly placed fill as much as possible but care is to be taken to see that they never follow each other in one set of tracks.

Material shall be placed at the most advantageous moisture level. Material too dry shall be sprinkled as required. Material too wet shall be allowed to dry before being compacted in the fill. In general, only the impervious central core of the dam will need any special moisture control. This material, when being compacted, shall contain sufficient moisture to allow it to be formed into a hard ball or to be molded with firm pressure of the fingers. It shall not contain so much moisture that the compaction process described above will result in excess water being brought to the surface of the soil.

In any areas that cannot be reached and compacted by the dozer, compaction is to be effected using a Barco tamper. All material placed in 8-inch layers is to receive at least one pass with this tamper. If pneumatic tampers are used, material is to be placed in layers not to exceed 4 inches thickness measured loose.

After a period of rain or high humidity, all muddy or loose material is to be pushed off the dam and disposed of in the downstream bed of the reservoir.

At all times care must be taken to secure good bond between successive vertical layers of material placed and between the various horizontal layers.

Upon completion of the main structure of the dam itself and trimming of the side slopes, the Contractor may proceed with placing the sand mat, broken stone wave-control blanket and loam borrow.

Article 83L Debris Pins & Sleeves The Contractor shall furnish and install brass pipe sockets and steel debris pins as shown on the plans on each wier.

The pipe sockets shall be accurately set and cast into the concrete.

1. Materials Pipe sockets shall be 1 $\frac{1}{4}$ " standard red brass pipe. The bottom of each sleeve shall be closed with a brass cap, and during construction, the top of each socket shall be closed with a brass coupling and brass plug.

Pins shall be 1 1/8" diameter hot rolled steel "Rycase", identifying color Gold. Other steel having a yield point of 44,000 psi may be substituted.

Article 83 M. Loam & Seed Work Included Included under Item I is the furnishing, placing, spreading, and fine grading of loam borrow on both faces of that portion of the dam disturbed, and the liming, fertilizing and seeding of all areas loamed. Loam is to be placed in the areas indicated on the plans.

1. Materials Loam borrow shall be of a quality acceptable to the Engineer and shall be a good grade, black natural soil containing a reasonable amount of humus.

Limestone shall be agricultural ground limestone.

Fertilizer shall be a standard commercial 5-10-5 fertilizer.

Seed shall meet the following analysis:

Orchard Grass - 30% or less

Domestic Rye - 20% or less

Red or Cured Fescue - 20% or more

Blue Grass - 20% or more

Other perennial grasses - 8%

Inert material, weeds and other matter - 2% or less

2. Construction Methods After all other work has been completed and the area generally cleaned up, the top surface of slopes where loam is to be placed shall be fine graded to a plane six inches (6") below the proposed finished surface. Loam shall then be spread over the areas to provide six inches (6") of loam when compacted. The loam shall be fine-graded to proper lines and so as to match and blend in with the grassed areas of the old embankment. Ground limestone shall then be spread over the loam at the rate of one pound (1 lb.) per square yard, and fertilizer spread at the rate of 0.2 pound per square yard. After this the loam shall be spaded to its full depth. It shall then be regraded and rolled to a smooth even surface. The surface shall be loosened by raking and seed sown at the rate of 5 lbs. per 100 sq. yds. Seeding shall be done in two directions at right angles to each other. Seed shall then be covered with a thin layer of loam and the entire area rolled to a firm smooth surface. Loamed & seeded areas shall be kept moist for at least 14 days after sowing.

The Contractor may top mulch or otherwise protect the newly seeded areas as required.

The Contractor shall maintain seeded areas until all work is

complete and accepted. Maintenance shall consist of providing protection against traffic and erosion and watering as necessary. Damaged areas and areas of unsatisfactory growth shall be repaired and reseeded as necessary at no additional cost to the Owner.

Article 83N Re-set Chain Link Fence and Furnish New Gate Work Included Included under Item I is the re-setting of the chain link fence now standing on the southerly edge of the top of the dam embankment, and the cutting and re-aligning of the fence to provide for the installation of a new three-ft. (3') gate with locking device.

1. Materials The existing fence shall be salvaged and all materials re-used to restore the fence. If posts or other parts are damaged or lost, new posts and/or other parts of the same size and pattern as those damaged or lost shall be furnished by the Contractor at no additional cost to the Owner.

The Contractor shall furnish one (1) new chain link fence gate three feet (3') wide full height of fence, with  $2\frac{1}{2}$ " O.D. gate posts. Wire mesh shall match mesh of present fence. Gate shall be equipped with spring latch with provision for attaching a padlock to the latch.

The Contractor shall also furnish any new or additional fittings or specials required for or incidental to restoring the fence and inserting the gate.

2. Construction Methods The existing fence shall be carefully removed and stored as required under Article 83B, Paragraph 2.

After all other work has been completed, the fence shall be re-erected. Posts shall be set 30" deep in concrete. The concrete shall be properly shaped at its top to shed water away from posts.

The fence shall be re-set to the same line and grade it now has.

Posts shall be securely braced until concrete has set to insure their holding proper position.

Article 83-0. Sluice Gate Work Included Included under Item I is the furnishing and installing of a 16" sluice gate, Chapman Valve Mfg. Co. Table 5, or approved equal, flange type frame with steel extension stem, two (2) stem guide brackets and bearings cast iron stand support and plain gate stand, and anchor bolts or other appurtenances required to complete the installation. The Contractor shall also furnish and install in the south wall of the intake structure a 16" flanged wall casting or thimble to which the sluice gate shall be attached on the inside of the intake and the 16" drawdown pipe attached outside the intake.

Gate stand shall be mounted at the top of the intake structure and provisions shall be made in the aluminum grate required below for the cast iron stand support.

Anchor bolts for the cast iron stand shall be cast into the concrete.

Article 83P Aluminum Grates Work Included Included under Item 1 is the furnishing and installing of aluminum grates at the top of the intake structure, including bearing angles, anchors, and fastening blocks all as indicated and shown on the plans.

1. Materials Grating shall be aluminum Thelen Type A-1, 1" depth; bearing angles shall be aluminum Thelen Type A-1 with aluminum anchors @ 12" centers; fastener blocks shall be aluminum Thelen Type F-1. (Grating of another manufacturer of approved equal may be substituted for Thelen).
2. Construction Method The bearing angles shall be cast into the concrete as shown on the plans. Angles shall be fastened to the forms with aluminum nails on all four sides of openings in top of intake. Fastening blocks shall be secured to bearing angles on bearing sides only with 3/8" aluminum allen set screws. Bearing angles shall be drilled and tapped after setting.

One (1) grating shall be cut to provide for the cast iron gate stand to be mounted at the top of the intake structure.

Article 83Q Steel Bar Rack for Orifice Opening Work Included Included under Item 1 is the furnishing and installing of a steel bar rack in the orifice opening on the south side of the spillway shaft.

1. Materials Structural steel shall be standard hot-rolled structural shapes; size, style and fabrication as shown on plans.

Anchor bolts shall be L-shaped  $\frac{1}{2}$ " diameter cast in concrete in proper locations for anchoring the angle frame.

2. Construction Methods The bar rack shall be constructed by welding together four 3/16 x 2 $\frac{1}{2}$ " angles to form a 4-sided frame.  $\frac{1}{4}$ " x 2 $\frac{1}{2}$ " flat steel shall be welded top and bottom to the frame. Spacing on the bars shall be approximately 5 $\frac{1}{4}$ " on centers.

3. Painting All structural steel and exposed anchor bolts and nuts shall be painted 3 coats in accordance with the requirements of Article 84C.

Article 83R Gravel Walk Work Included Included under Item 1 is the construction of a gravel walk across that section of the existing dam embankment disturbed during construction. Also included is the stone-dust covering of this walk.

1. Materials Gravel shall be an acceptable bank-run gravel from which all stones with largest dimension greater than 4" have been removed.

Stone dust shall be trap-rock stone dust.

2. Construction Method The top eight inches (8") of the dam embankment shall consist of gravel installed and compacted in

two (2) four-inch (4") layers. The top surface shall be crowned each way from the centerline and shall have a uniform grade. After all other work is completed, the gravel shall be covered with 1/2" stone dust, which shall be rolled to a smooth finish. The stone dust shall be dampened to assist compaction.

Article 83S Payment Payment shall be made to the Contractor for all labor, tools, materials and equipment furnished in constructing the intake structure, discharge conduit, and draw-down pipeline complete and ready to use, at the lump sum price specified in his proposal, which payment shall include: preparation of site, excavation, sheathing, concrete reinforcing steel, sluice gate, cast iron pipe, fittings, debris pins and sockets, aluminum grating and appurtenances, removal and resetting of fence, furnishing and erecting new gate, and restoration of dam embankment, and any or all work required for or incidental to providing a complete facility ready to operate.

If the Contractor is ordered in writing by the Engineer to furnish borrow for Pervious Fill in accordance with Article 83, Par3, additional payment over and above the lump sum payment for Item No. 1 shall be made to the Contractor as follows: for each cubic yard of Pervious Borrow furnished, hauled, placed and compacted, the sum of one dollar and twenty-five cents (\$1.25) which payment shall include all labor, materials, tools and equipment required for or incidental to furnishing, placing, and compacting pervious fill when such fill is ordered in writing by the Engineer.

Quantity upon which payment shall be made for Pervious Fill Borrow shall be determined either by measurements made in the field by the Engineer or on a truck measurement basis at the option of the Engineer. If truck measurement is used, the Contractor shall furnish to the Engineer, a delivery slip for each load of borrow furnished. Truck measure shall be based on the actual cubage of the truck body with an allowance for heaping.

ITEM 2

Access Bridge

Article 84A Work Included Included under Item 2 is the furnishing of all labor, tools, materials, and equipment required for or incidental to providing an access footbridge between the top of the dam embankment and the intake structure, including structural steel, anchor bolts and other fastenings, and lumber, all as shown in detail on the Plans and further described herein.

Article 84B Materials The materials furnished under this item shall be as follows:

- (a) Structural Steel shall be standard hot rolled structural, shapes, size, style and fabrication as shown on Plans. Bearing plates shall be as shown on Plans.
- (b) Anchor Bolts shall be "L" shaped, 5/8" diameter anchor bolts cast in concrete in proper locations for anchoring structural steel.
- (c) Lumber shall be No. 1 85% heart long-leaf yellow pine, sizes as shown on Plan.
- (d) Preservative All wood shall be given 2 coats of hot coal-tar creosote oil before it is fastened in position. All cuts and bore holes shall also have two coats of preservative.

Article 84C Painting All structural steel and exposed anchor bolts and nuts shall be painted three (3) coats. The first coat shall consist of a shop coat of red lead primer. The steel shall not be handled, or trucked, or otherwise moved until at least seven (7) days after the shop coat has been applied.

After erection, all damaged areas of the prime coat shall be thoroughly cleaned and touched-up with red lead primer.

After the touch-up coat has thoroughly dried, the second coat of gray primer shall be applied. This shall be allowed to dry at least seven (7) days before applying the finish coat.

The finish coat shall be structural Chrome Oxide Green Paint.

Article 84D Payment The Contractor shall be paid at the lump sum price specified in his proposal for all labor, tools, materials and equipment furnished in providing an access footbridge, which payment shall include the furnishing and installing of all structural steel, lumber, bearing plates, anchor bolts and other fastenings required for or incidental to providing a complete structure excepting concrete supports at ends which are to be paid for under other items.



ITEM 3.

PREPARATION OF BRIDGE AND SPILLWAY WALLS

FOR

ALTERATIONS AND RESTORATION OF BRIDGE

Article 85A. Work Included. Included under this item is the furnishing of all labor, tools, materials and equipment required to remove the wooden portion of the foot bridge and sections of the steel rail beams at each end to provide space for carrying out the work of altering the walls surrounding the bridge, and the restoration of the bridge structure after the completion of the alterations to the walls. The work includes but is not limited to removing and disposing of the bridge floor planking, the  $3\frac{1}{2}" \times 5\frac{1}{2}"$  nailers, the wooden curb guards and the wooden fences and cutting off each of the railroad rails which serve as bridge beams at each end, as shown on the plans and removing and resetting chain link fence. It includes also drilling in the top of the existing walls to provide for dowels between the existing concrete and the proposed concrete. It also includes the restoration of the foot bridge with new materials as required below, after the completion of the alterations to the concrete walls. It does not include trench excavation which is included under Item 4.

Article 85B. Materials. Lumber shall be #1, 85% heart, long-leaf yellow pine, sizes same as existing members. The lumber shall be treated with two coats of coal tar creosote oil applied after the lumber has been cut and before it is installed.

Material for guard rail to be installed on north side of bridge only shall be peeled Cedar logs for both posts, rails and braces, sizes similar to existing members.

Article 85C. Methods. The Contractor shall remove the guard rail and the curb guard, bridge planking and nailers. The ends of the existing bridge beams (railroad rails) shall be cut off so as to provide 12" bearing on the existing concrete walls.  $1\frac{1}{2}"$  holes, 18" deep shall be drilled along the top of the existing walls where they are to be raised at 18" centers.

After completion of the alterations to the walls surrounding the bridge, the bridge shall be restored by installing new guard rail, on the north side only, curb guards, bridge

planks and nailers as required above. All fastenings shall be similar to existing fastenings.

All steel shall be scraped and thoroughly cleaned and painted with three (3) coats of paint in accordance with the applicable portions of Article 84C.

Article 85D Payment The Contractor shall be paid for work performed under this item at the lump sum price specified in his proposal, which payment shall include the furnishing of all labor, tools, material and equipment required for or incidental to preparing the bridge for the alterations to the walls surrounding it, the removal and disposal of wooden portions of the bridge and in the restoration of the bridge. It shall not include payment for altering the existing concrete walls, nor for trench excavation required, both of which shall be paid for under their respective items.

ITEM 4.

TRENCH EXCAVATION

Article 86A. Work Included. Work included under this item is the furnishing of all labor, tools, material and equipment required for excavating around the existing bridge and spillway walls and in excavating on the downstream side of the discharge conduit and existing spillway for placing riprap. It also includes backfill of the areas excavated when such filling is required. It does not include any of the excavation required for installing the intake structure, the discharge conduit and the drawdown pipeline, all of which are included under Item 1.

Article 86B. Construction Methods. Excavation shall be carried out in the locations and within the limits designated by the Engineer. Excavation required for altering the concrete walls around the foot bridge shall be done by hand methods. Excavation for riprap may be done either by hand or by machine methods.

Backfill of trenches shall be done by hand, and all material shall be tamped using pneumatic or other approved mechanical tampers in layers not exceeding 6-inches. No stones whose largest dimension exceeds 6" shall be used in backfilling. The top 8" of trenches in the walkway shall be filled with bank-run gravel and covered with trap rock dust in the same manner as required under Item 1 Article 83Q..

Article 86C. Payment. The Contractor shall be paid for each cubic yard of trench excavation carried out at the direction of the Engineer at the unit price specified in his proposal for trench excavation, which payment shall include furnishing of all labor, tools, materials and equipment required for or incidental to providing trenches for carrying out the work or placing materials as may be required. It shall also include all backfill of the trenches as required.

ITEM 6.

MISCELLANEOUS CONCRETE

Article 87A. Work Included. Included under this item is the furnishing of all labor, tools, materials and equipment required for providing concrete extensions to the existing walls surrounding the foot bridge and spillway. It includes the furnishing of all form work required and the preparation of existing concrete surfaces except the drilling of dowel holes which is included under Item 4.

Article 87B. Materials. Concrete furnished under this item shall comply with the requirements of Article 83G.

Article 87C. Construction Methods. Concrete extensions to existing walls surrounding the foot bridge and spillway shall be constructed to the lines and grades required by the Engineer. Details shown on the Plans are approximate only and the exact requirement for the extensions required under this item will be determined in the field at the time of construction.

Article 87D. Finishing. All exposed surfaces shall be finished by rubbing to a smooth even surface with carborundum stone. The addition of cement or grout to the concrete surfaces for the purposes of finishing will not be permitted. Work under this item shall comply with the requirements of Article 83G, Para. 13.

Article 87E. Payment. The Contractor shall be paid for each cubic yard of concrete formed, placed and finished for altering the existing walls around the foot bridge and the spillway walls when directed by the Engineer at the unit price specified in his proposal, which payment shall include all work required for or incidental to providing and completing alterations to the existing walls as shown on the plans or as required by the Engineer.

ITEM 6

REINFORCING STEEL

Article 88A. Work Included. Included under this item is the furnishing and placing of re-inforcing steel as required in the proposed concrete extensions to the existing walls surrounding the foot bridge and spillway. It shall not include any reinforcing steel furnished and placed in the intake structure and the discharge conduit which steel is included and will be paid for under Item 1.

Article 88B. Materials Materials furnished under this item shall comply with the applicable portions of Article 83H.

Article 88C. Construction Methods. Reinforcing steel under this item shall be placed and supported in accordance with the requirements of Article 83H.

Article 88D. Measurement. Quantities upon which payment for reinforcing steel will be based, under this Item, shall be the actual length of the various size rods used as shown on the plans or as required by the Engineer multiplied by the standard unit weight for the particular size bar specified.

Article 88E. Payment. The Contractor shall be paid for each pound of reinforcing steel furnished and placed in the concrete extensions of the existing walls surrounding the foot bridge and spillway at the unit price specified in his proposal, which payment shall include the furnishing of all labor, tools, materials and equipment required for or incidental to the reinforcing steel work.

ITEM 7.

RIPRAP.

Article 89A. Work Included. Included under this item is the furnishing and placing of riprap in the brook channel downstream from the northerly end of the discharge conduit around the existing spillway. The item includes furnishing, hauling, placing, shaping and chinking riprap as required below. It does not include excavation for riprap which shall be paid for under Item 4.

Article 89B. Materials. Stone for riprap shall be sound, of approved quality and angular in shape. Rounded stones or boulders or relatively thin slabs will not be acceptable. At least 75% of the volume shall consist of stones that individually weigh at least 1,500 lbs. The remainder of the stones shall be so graded that when placed with the larger stones, the entire mass will be compact.

Article 89C. Construction Methods. The bed or subgrade upon which riprap is to be placed shall be carefully graded to the lines and grades required by the Engineer. The depth of riprap shall be 24". No riprap shall be placed until the subgrade has been properly excavated and graded.

All stones shall be carefully placed on the prepared bed. Larger stones shall be placed as closely together as possible throughout the surface and spaces between these stones shall be filled with the smaller stones in such a manner that the entire surface will become a compact mass of stone. It will not be required that the surface shall be especially smooth or even. It will be required, however, that the average thickness of the stone work shall be as required on the plans.

Article 89D. Measurement. The quantity upon which payment shall be based shall be determined by measurements taken in the field by the Engineer. The measurements shall be taken in planes parallel with the surface of the riprap. No quantity will be included for riprap placed in areas not required by the Engineer. Maximum depth for which payment will be made shall be 24".

Article 89E. Payment. The contractor will be paid for each cubic yard of riprap furnished and placed as directed by the Engineer at the unit price stipulated in his proposal, which payment shall include the furnishing, hauling, placing and chinking of riprap or any other work required for or incidental to providing a riprap surface satisfactory for the discharge of the conduit.

## ITEM 8.

### FILLING, GRADING, LOAMING & SEEDING.

Article 90A. Work Included. Included under this item is the furnishing of all labor, tools, material and equipment required to fill the areas on the embankment slopes abutting the concrete walls at the existing spillway when their height is altered with earthen material, grading and loaming and seeding these areas. It shall include furnishing and placing all fill whether obtained as spoils from the work or borrowed from outside the site, as well as loam, seed, lime and fertilizer required.

Article 90B. Materials. Fill shall be ordinary earth with stones exceeding 6" in their longest dimension removed. It may be either spoils from other work, if satisfactory to the Engineer or ordinary borrow.

Loam, seed, lime and fertilizer shall comply with the requirements of Article 83M, Para. 1.

Article 90C. Methods of Construction. After the spillway and bridge walls have cured sufficiently, in the opinion of the Engineer, the areas surrounding them shall be filled to lines and grades and within the areas designated by the Engineer. The fill shall be fine graded approximately six (6) inches below the finished grades to provide for loam.

The fill shall be placed in six(6) inch layers and each layer shall be thoroughly compacted with pneumatic or approved mechanical tampers.

After the fill has been graded and compacted, loam shall be spread over the entire area six (6) inches deep. The grading, rolling, fertilizing and seeding of the loam shall be carried out in accordance with the requirements of Article 83M, Par.2.

Article 90D. Measurement. Quantity upon which payment shall be based shall be determined from field measurements taken by the Engineer. Measurements shall be taken in planes parallel to the finish surfaces. Measurement shall include only the areas in which filling, loaming and seeding have been required by the Engineer. The areas at the top of the embankment shall not be included under this item. They shall be filled with material removed from trenches and this work shall be included under trench excavation.

Article 90E. Payment. The contractor shall be paid for work performed under this item at the unit price specified in his proposal for each square yard of filling, loaming, seeding, liming and fertilizing in the areas abutting the existing spillway walls, which payment shall include furnishing all labor, tools, materials and equipment required for or incidental to the work.

### FINAL CLEANUP.

Article 91. At the conclusion of all work the contractor shall remove the temporary fences and signs required under Article 80 above. He shall remove and dispose of all surplus materials resulting from his operations including earth, trees, stumps, roots or other debris in a manner satisfactory to the Engineer. The entire area over which he has worked shall be carefully raked and cleaned so as to leave the entire area in a manner satisfactory to the Engineer.



Dam Repairs

MINIMUM WAGE RATES and HEALTH and WELFARE FUND CONTRIBUTIONS as determined by the Commissioner under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27D, inclusive.

PROJECT: Local - Public Works

TOWN: Chicopee - Bemis Pond Dam

Classifications	Current Hourly Rate	Contrib. H & W Fund	Total Hourly Rate	Changes:		
				Hourly Rate	H & W Fund	Total Rate
				AFTER:		
Crane Operator	\$3.25	3%	\$3.35			
Compressor Operator 220 cu.ft.	2.25	3%	2.32			
Carpenter	3.05	.10	3.15			
Common Laborer	2.05	.07	2.12			
Iron Worker	3.68					
Cement Finisher	3.52½	3%	3.63½			
Bulldozer Operator	2.80	3%	2.88			
Truck Driver	2.39½					

Sec.26. Payments by employers to health and welfare plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

Sec.27. The aforesaid rates of wages in the schedule of wage rates shall include payments by employers to health and welfare plans as provided in the previous section, and such payments shall be considered as payments to persons under this section performing work as herein provided. Any employer engaged in the construction of such works who does not make payments to a health and welfare plan, where such payments are included in said rates of wages, shall pay the amount of said payments directly to each employee engaged in said construction.

# **CONTRACT**



**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
**HOLYOKE, MASS.**

C O N T R A C T

Clause 1. This Agreement, made this \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_ in the year nineteen hundred and fifty \_\_\_\_\_, between the  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
herein referred to as the "Owner", and \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
herein referred to as the "Contractor".

Clause 2. Witnesseth, That the parties to this Agreement, each in consideration of the agreements on the part of the other herein contained, do hereby agree, the Owner, for itself, and said Contractor for himself/themselves and his/their heirs, executors, administrators and assigns, as follows:

The Contractor agrees to furnish all equipment, machinery, tools and labor, to furnish and deliver all materials required to be furnished and delivered in and about the improvement and to do and perform all work in:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

in strict conformity with the provisions herein contained and the Advertisement for Bidders and Proposal hereto annexed, and the General Requirements and Special Provisions hereto annexed, and with the plans referred to therein. All said plans, general requirements, special provisions, addenda,

Advertisement for Bidders, and Proposal are hereby specifically made a part of this contract as fully and to the same effect as if the same had been set forth at length herein.

Clause 3. In consideration of the foregoing premises the Owner agrees to pay and the Contractor agrees to receive as full compensation for everything furnished and done by the Contractor under this contract; including all work required but not shown on the plans for the items herein mentioned, and for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any delay or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, and for well and faithfully completing the work, and the whole thereof, as herein provided, such price or prices as are set out in the accompanying proposal, and for

all work required, for which there is no item in the proposal, such compensation as is provided for in the aforesaid specifications.

IN WITNESS WHEREOF, the Owner has caused this instrument to be signed and its corporate seal to be hereto affixed in its behalf, and the Contractor has caused this instrument to be signed in its behalf.

For the Owner,

Witness:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By the \_\_\_\_\_

(  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For the Contractor,

Witness:

\_\_\_\_\_

By the \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Courtney Company Dam



1933 Chicopee

Located on Chicopee River.

City/Town	Chicopee
Dam	Courtney Company Dam
Name	Dana S Courtney Company
Name	Courtney, Dana S
Water	Chicopee River

WEDNESDAY, APRIL 27, 1933

## **COURTNEY DAM IS AFFECTED BY NEW BRIDGE**

**Trial of Equity Suit Against City  
of Chicopee Begun Before  
Judge Dillon**

John F. Vaughn, engineer, of Boston, was on the witness stand all morning during the hearing before Judge David F. Dillon in the jury-waived sitting of superior court of the case of the Dana S. Courtney company against the city of Chicopee. The suit is in equity and involves damage claims made by the plaintiff against the defendant for building a concrete bridge over the Chicopee river at a point injurious to the dam of the plaintiff. The bridge was built during Mayor Cloutier's administration in 1931. Part of it is alleged to be on land of the plaintiff, while piers cut into sections of the dam.

Nathan P. Avery is conducting the case for the plaintiffs and City Solicitor Stanley F. Jorczak and Atty Joseph A. Nowak are representing the city. The hearing is likely to last for several days.

April 26, 1933

Dana S. Courtney Co.,  
84 Chicopee Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following condition noted and recommendation made by him;

"Portions of the deck planking of this structure are not in very good condition and require some repairs."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_



# THE DANA S. COURTNEY CO.

MANUFACTURERS OF

## BOBBINS AND SPOOLS

CHICOPEE, MASS.

May 18, 1933

County Commissioners,  
Hampden Co.,  
Court House,  
Springfield, Mass.

Gentlemen:

Att. Thomas J. Costello, Chairman

This will acknowledge your letter of April 26th, recommending certain repairs to be made to the deck planking of our dam. Since this letter was received the water has been so high that we have not been able to do anything to the dam, but will make necessary repairs as soon as we have a little lower water.

Very truly yours,

THE DANA S. COURTNEY CO.

BY

S. T. Packard

S. T. Packard, Gen. Mgr.

P:R

Desmarais Dam



1926 Chicopee

Located on Hearthstone Quarry Brook

City/Town	Chicopee
Dam	Desmarais Dam
Name	Desmarais, F X
Water	Hearthstone Quarry Brook

F. X. Desmarais,  
Northington St.,  
Aldenville, Mass.

you are notified that your  
ice pond dam, located on a small tributary to the  
Chicopee river so called in that part of the City  
of Chicopee known as Aldenville, etc.

"For greater safety against flood  
water topping the embankment, it  
is recommended that a surface  
spillway or overflow be provided."

Now, therefore, etc.

March 10, 1926

Mr. F. X. Desmarais,  
Worthington Street,  
Aldenville, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your ice pond dam, located on a small tributary to the Chicopee River so-called in that part of the City of Chicopee known as Aldenville, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"For greater safety against flood water topping the embankment, it is recommended that a surface spillway or overflow be provided."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_

April 26, 1933

Mr. F. X. Desmarais, ✓  
Worthington Street,  
Aldenville, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 324 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on Hearthstone Quarry Brook in the City of Chicopee, has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"The overflow on this dam is a 30 inch diameter pipe laid down the slope of the embankment from a concrete bulkhead at the upper end. The earth has washed away from this pipe, leaving it exposed for practically its entire length. This washout should be repaired by filling with earth around the pipe. It would also be advisable to add to the safety of the dam by providing a surface overflow in the form of a swale in the natural earth beyond one end of the dam. This latter could be easily done."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Fairview Sportsmens Fish & Game Association Dam



1942 Chicopee

Located on Willimansett Brook in Fairview. See also: County Highways: (Chicopee) "Fairview Fish & Game Club Inc Dam on Willimansett Brook" - ch11002 & ch11037.

City/Town	Chicopee
City/Town	Fairview
Dam	Fairview Sportsmens Fish & Game Association Dam
Name	Fairview Sportsmens Fish & Game Association Inc
Name	Fairview Sportsmens Fish & Game Club
Water	Willimansett Brook

# Fairview Sportsmen's Fish & Game Ass'n Inc.

Member of

Council of Sportsmens' Clubs of Hampden County



## LIST OF OFFICERS

ERWIN BISCHOFF, PRES.

JOHN MAZIARZ, VICE-PRES.

CHARLES NELSON, TREAS.

JAMES E. ALLEN, SECRETARY

6 CHERRYVALE ST.

FAIRVIEW, MASS.



Fairview Mass.

Sept. 28, 1942.

Sirs:-

Received your letter of Sept. 2, 1942. telling us of the inspection of our dam. In your letter you tell of repairs that have to be made on the concrete overflow also any information we may desire. Now, this is what we would like to know. Just what are your requirements concerning the overflow. Would you put your requirements in writing and send them to me. or, would you rather I meet with you in person to go over this condition. Your early reply would be appreciated.

Yours Truly.  
James E. Allen. Sec.

October 6, 1942

James E. Allen, Sec.  
2 Cherryvale St.  
Fairview, Mass.

Dear Sir:

In answer to your letter of Sept. 28th last we wish to state that the requirements of the County in regard to your dam, are to make such repairs on the concrete overflow and overflow channel, as will give to the structure its original stability.

As you must have observed, the exposed concrete surfaces, especially of the overflow channel, show considerable spalling and disintegration. This disintegration has gone to a depth of several inches in the channel walls, and has exposed some of the steel reinforcing bars.

Because of this disintegration within such a short time after the structure was completed, we suggest that, before making the necessary repairs, you take the matter up with your engineer who designed the structure.

Yours very truly,

COUNTY COMMISSIONERS

Thos. J. Costello Chairman

Charles W. Bray

Edward J. Stapleton



September 2, 1942

Fairview Sportsmen's Fish & Game Assoc.

Willimansett, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on Willimansett Brook in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him:

"The concrete overflow structure which extends through the middle of this earth dam is showing some erosion and disintegration in the light, reinforced concrete side walls. It is recommended that the owner be notified to repair this overflow in a substantial manner before the end of the present year."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

BY \_\_\_\_\_ Chairman

\_\_\_\_\_

\_\_\_\_\_

October 3, 1945

Fairview Sportsmen Fish & Game Club

Willimansett, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on Willimansett Brook in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"The erosion of the natural ground at the downstream end of the concrete spillway of this structure, caused by the discharging water should be repaired."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_

TIGHE & BOND

COPY

April 9, 1951

Mr. Walter J. Long  
5 Riverview Place  
Williamansett, Mass.

Dear Mr. Long:

This letter will confirm our conversation of last Friday afternoon pertaining to the new dam being constructed by the Fairview Fish & Game Association on their property in Chicopee.

The proposed dam is being constructed on a small inlet to the main pond. The pond to be formed by the dam will be fed by springs and a small drainage area consisting of a few acres. The dam, when completed, will be approximately 7 to 8 feet in height, and the pond formed by the dam will contain less than one million gallons of water. In order to come under County control, the dam must fall within one of the following three categories:

1. It must be 10 feet in height or higher.
2. It must impound one million gallons of water or more.
3. It must have a drainage area of 1 square mile or more.

Since your proposed construction does not come within any of the above three categories, your dam will not come under County control.

It would be advisable, however, in order to protect the proposed dam, to construct a trough type spillway in addition to the pipe spillway now under construction. This trough type spillway could be located on natural soil at the northeasterly end of the new construction. This spillway is not required, however, I think it would be advisable to include it since the cost would be negligible if installed during the present construction program.

Very truly yours,

By

G. H. McDonnell  
County Hydraulic Engineer

November 26, 1952

Fairview Fish & Game Association, Inc.  
Fairview, Massachusetts

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located on Willimansett Brook in Fairview has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"The concrete spillway at the old main dam has become badly disintegrated at the upstream wings. Earth fill at the downstream wings has been washed and should be replaced with a good hard packed gravel or rip rap. If the dam and pond are not being used and are to be abandoned, the draw off pipe should be opened wide and/or the dam safely breached."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Fairview Fish & Game Assoc. Dam  
Fairview*

Czaporanski Dam



1948 Chicopee

Proposal for a small dam.

City/Town	Chicopee
Dam	Czaporanski Dam
Name	Czaporanski, Frank M

water held back to not  
exceed over 4000 gals of water.

Are there any specific rules,  
as to type of dam to be  
built, to be within the law?

I need all information before  
I can go on with my project  
and since the property is useless,  
I wish to try to use to its best  
possibilities and to this conclusion  
I have come to, in keeping  
live land, as the property has  
all natural resources, water,  
vegetation and what not for a small  
pond.

Sincerely yours  
Frank M. Zaporowski

Copy of this letter  
mailed to Mr. Bond on  
Nov. 29, 1948.

Nov. 21 77  
Williamstown  
Mass.

NOV 23 1948

Dear Sir,

I have send you a  
message requiring some  
information, as to my building  
a small pond on my property  
and as yet, do not know, whether  
message got to you or not.

Would not have troubled you  
either time, only that the  
Game Warden in my territory  
informed me to write to my  
County Engineer and having  
acquired information, that you  
are the party I should contact,

The piece of property is about  
50 feet wide, 85 feet long  
with a drainage ditch runs thru  
property down grade, emptying to  
a main drain that runs out to  
the Conn. river.

No homes are in path of ditch,  
only for two homes that are  
a good distance from my property,  
both on a hill about 50 feet to  
a 100 feet clear to ditch, that  
runs thru other property owners.  
What are the restrictions if any,  
as to anyone building a small pond,  
to store shrimp (live bait) or to  
have any type of pond with

as to building any type of dam.

In my other message had  
plans to store guano a little  
water, around 12,000 gals or so.

Have come to a decision, to  
cut this down to 3000 or about  
4000 gals. the most.

My plans are to build a pond  
15 by 10, with 3 foot depth,  
as this is more natural and  
less effort, also eliminating  
any danger in holding a too  
great body of water on property.  
This piece of property is well  
and would cost me too much  
to have filled in.

*Chapman*

November 29, 1948

M. J. Dalton, District Highway Engineer,  
40 Foster Street,  
Worcester, Mass.

Dear Mr. Dalton:

This will acknowledge receipt of  
your letter dated November 23, 1948 and letter from  
Frank M. Czaporanski, Willimansett, which you enclosed.  
We are referring the letter to Philip E. Bond, County  
Hydraulic Engineer, asking Mr. Bond to get in touch  
with Mr. Czaporanski.

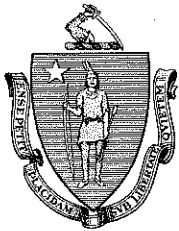
Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman.

CWB/N





*The Commonwealth of Massachusetts*  
*Department of Public Works*

DISTRICT #3 - 40 Foster Street  
Worcester, Mass.

November 23, 1948.

Permits

Charles W. Bray, Chairman  
Hampden County Commissioners  
Springfield, Mass.

Dear Sir:

Enclosed herewith you will find communication received in this office today from Frank M. Czaporanski, Willimansett, Mass., concerning the construction of a small pond on his property in the vicinity of Chicopee, Mass.

Yours very truly,

A handwritten signature in cursive script, reading "M. J. Dalton".

M. J. Dalton,  
District Highway Engineer.

MJD/OC

Encl.

JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

December 7, 1948

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Charles W. Bray, Chairman

Gentlemen:

Frank M. Czaporanski, 32 Wilmont Street,  
Willimansett, Massachusetts, who requested in-  
formation relative to building a small dam, has  
been visited.

The proposed dam will be less than 10  
feet high, will store only about 4,000 gallons of  
water and is on a small stream with little drainage  
area. Mr. Czaporanski was advised that the dam  
does not come under county jurisdiction. Advice  
was given him relative to the building of the dam.

Very truly yours,

TIGHE & BOND

By

  
Philip E. Bond

Messer Dam



o Chicopee

See Also: Dam Report Section - Chicopee. See Also: Messer Dam aka Lemieux Dam.

City/Town	Chicopee
Name	Messer, H T
Water	Messer Dam

CHICOPEE  
D05013

MESSER DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

Hampden Bleachery Company Dam



1933 Chicopee

Located on small tributary of the Chicopee River.

City/Town	Chicopee
Dam	Hampden Bleachery Company Dam
Name	Hampden Bleachery Company
Water	Chicopee River

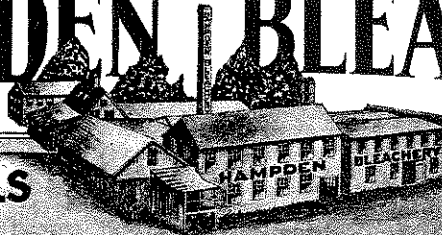
# HAMPDEN BLEACHERY

E. J. O'NEIL

PRESIDENT

CHICOPEE FALLS

MASSACHUSETTS



ESTABLISHED 1868

*County Commissioners*

*Sprengfeld Mass*

*Gentlemen*

*The repairs suggested by your  
engineers on our pond had been  
completed -*

*Very truly*

*Hampden Bleachery*

*June 24 33*

April 26, 1933

Hampden Bleachery Co.,  
103 Sheridan Street,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following condition noted and recommendation made by him;

"The dam is in fair condition except the east end of the concrete facing wall, which shows some erosion. This part of the wall should be repaired and the erosion checked."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

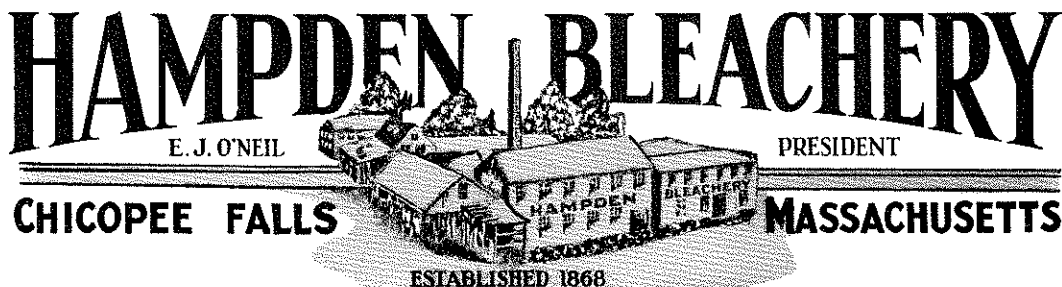
Yours very truly

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_

\_\_\_\_\_



September 15, 1941

Hampden County Commissioners  
Springfield, Mass.

Gentlemen:

In accordance with your letter  
of August 27, we have repaired the concrete  
retaining wall running upstream from the east  
end of the structure.

Very truly yours,

HAMPDEN BLEACHERY

EJO:B

Copy of this letter sent to County  
Engineer James L. Tighe.



Hampden Bleachery Co.  
22 Broadway  
Chicopee Falls, Mass.

August 27, 1941

Gentlemen:

In accordance with the provisions of Chapter 253 Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on a small tributary of Chicopee River in Chicopee Falls has been inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"This dam is in fair condition but there is need of repairs on the concrete retaining wall running upstream from the east end of the structure."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_

September 2, 1942

Hampden Bleachery Company  
22 Broadway  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on a small tributary of Chicopee River in Chicopee Falls has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him:

"The pond formed by this dam has been drawn down to a level of some 4 feet below the overflow. Before this pond is allowed to re-fill, the concrete overflow channel and the concrete facing wall of the dam should be repaired."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_

Hampden Brewery Dam fka Mount Tom Corporation Dam



1926 Chicopee

Located on Willimansett Brook.

Dam	Mount Tom Corporation Dam
Name	Mount Tom Corporation
Name	Hampden- Harvard Breweries Inc
Name	Hampden Brewery Dam
Water	Willimansett Brook

March 24, 1926

Mt. Tom Corp.,  
Willimansett, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on Willimansett Brook so-called in that part of the City of Chicopee known as Willimansett, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"The dam is in good condition, and the pond formed thereby covers about three acres. On the top of the spillway some debris is collected, which should be removed."

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING  
ELECTRICAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
**BOWERS AND PEQUOT STREETS**  
**HOLYOKE, MASSACHUSETTS**  
**TEL. JEFFERSON 3-3991**

**GEORGE H. McDONNELL**  
**PHILIP W. SHERIDAN**

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

CD-Chicopee  
Sept. 16, 1957

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Mass.

Gentlemen:

In accordance with a complaint by Mr. Tremblay of H. Tremblay Co., Inc., of Willimansett, I investigated conditions at Willimansett Brook in the vicinity of the Tremblay establishment and found that the brook has been silted and filled considerably above the elevation of the old brook bed. Consequently, the brook flow at time of any quantity of rain tends to overflow its banks and to flood onto adjacent property. A major rainstorm could result in overflowing waters passing thru the property of Tremblay Co. and doing damage to buildings and their inventory of barrels as well as their equipment.

It is my understanding that a project for the cleaning of this brook is to get under way in the near future. This project apparently will be sponsored by the Commonwealth of Massachusetts under a special act passed in relation to the condition in this brook.

An examination of the dams and structures along the brook indicates there is nothing in connection with these dams whereby the County Commissioners would enter into a solution of the problem since all dams are structurally and hydraulically sound. The problem involved is one of erosion upstream and the depositing of sands and silts in the brook along the Willimansett area.

The undersigned thought that if gates in the pond at the Hampden Brewery could be opened a large amount of the silt in that pond would be washed downstream and there would be a possibility that the cleaning action by the natural flow of the brook would work upstream and tend to lower the grade of the brook bed as now existing. I discussed this matter with officials of the City of Chicopee, since my last inspection of the brook indicated that brook waters were overflowing into the roadway during time of heavy rainstorms. It is my understanding that the City of Chicopee has also given consideration to the possibility of lowering the filled-in brook bed by opening the gates at the brewery dam. However, the Brewery apparently needs the pond for the purpose of their operation and the problems that would result in opening these gates and then closing them might be such as to definitely adversely affect the production at the Brewery.

CD-Chicopee Sept. 16, 1957

In summary, I do not see where the County would have any jurisdiction over the conditions in the brook as now existing. The Commonwealth of Massachusetts is apparently going to undertake the cleaning of this brook and the City of Chicopee has a vital interest in the clearing and cleaning of the brook since as the brook now exists, the water from a normal rainstorm overflows the brook onto adjacent street surfaces. Consequently, the City is anxious to have the condition at the brook rectified.

I explained to Mr. Tremblay that the County has no power to cause anything to be done in connection with the cleaning of the brook, since the safety of a dam is not involved. Until such time as either the State or the City can act to clean and clear the brook, I know of no action that can be taken on this matter.

Very truly yours,

A handwritten signature in dark ink, appearing to read "George H. McDonnell", is written over a horizontal line.

George H. McDonnell  
County Hydraulic Engineer

GHM/f

# HAMPDEN - HARVARD *Breweries, Inc.*

45-95 NORTH CHICOPEE STREET  
WILLIMANSETT, MASSACHUSETTS

Telephone: Springfield, REpublic 7-2637

October 30, 1959

County Commissioners  
County of Hampden  
37 Elm Street,  
Springfield, Mass.

Gentlemen:

We would be most happy at any time to cooperate with your County Hydraulic Engineer in assisting our neighbor, The Tremblay Co., Inc., for temporary flood relief.


However, I think it will be abundantly evident to your Engineer when he visits our property that the height of our dam has no influence on the flooding of the Tremblay property.

At the request of the City Engineer, well over a year ago during a period of extremely heavy rainfall, we drained our pond completely with no resultant improvement in the level of the brook at the Tremblay Co.

We are extremely anxious for our own benefit to solve this constant flooding problem and we will be happy to discuss this with your Hydraulic Engineer any time at his convenience.

Sincerely,

HAMPDEN-HARVARD BREWERIES, INC.

  
Harold M. Broderick  
Executive Vice President

HMB/f



*Established 1868*



November 2, 1959 - Copy of this letter sent to George H. McDonnell, County Hydraulic Engineer, MM

Holyoke Ice Company Dam



1928 Chicopee

Located on Willimansett Brook. See also: County Highways - "Holyoke Ice Company Dam" - ch15015-ch15022 & ch15033-ch15042.

City/Town	Chicopee
Dam	Holyoke Ice Company Dam
Name	Holyoke Ice Company
Water	Willimansett Brook



C O P Y

James L. Tighe  
189 High Street  
Holyoke, Mass.

December 21, 1928.

The Hon. Board of County Commissioners  
of Hampden County  
Springfield, Mass.  
George S. Cook, Chairman

Dear Sir:-

I recommend for your acceptance the two  
Earthen dams built in the City of Chicopee and which  
are now in service, namely, the Holyoke Ice Co. dam  
across the Willimansett brook of which the plans and  
specifications were approved in 1923 and the City  
of Chicopee Municipal Water Works storage dam across  
the Cooley brook of which the plans and specifications  
were approved in 1926.

Respectfully submitted,

JAMES L. TIGHE

April 26, 1933

Holyoke Ice Company,  
65 Prospect Street,  
Holyoke, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on Willimansett Brook in the City of Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"At the downstream end of the four foot diameter drain pipe there is considerable scour and erosion caused by the discharging water. This part of the structure should be repaired by depositing stone around and beneath the end of the drain pipe to prevent further damage, or a masonry channel should be provided to conduct the water away from the toe of the dam. The concrete walls of the overflow also show erosion which should be checked."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

**HOLYOKE ICE COMPANY**  
**WHOLESALE AND RETAIL ICE**  
HOLYOKE, MASS

April 29, 1933.

Hampden County Commissioners,

Springfield, Mass.

Gentlemen;

Replying to your letter of April 26th.,  
we would like to meet your engineer at the pond  
at Willimansett, that we may know just what he  
requires. We will have a representative there  
any time convenient to him.

Yours very truly,

Holyoke Ice Company,

by *E. J. Johnson*

J Stevens Arms Company Dam



1933 Chicopee

Process water dam located just west of Broadway in Chicopee Falls. See also: County Highways (Springfield) - "J Stevens Arms & Tool Company Plan Showing Site of Proposed Dam - Sixteen Acres, Mass" - ch 03082.

City/Town	Chicopee Falls
City/Town	Chicopee
Dam	Stevens, J, Arms Company Dam
Dam	J Stevens Arms Company Dam
Name	J Stevens Arms Company
Streets	Broadway



# J. Stevens Arms Company

MANUFACTURER OF

**SHOTGUNS, RIFLES, PISTOLS**

**CHICOPEE FALLS, MASS. U.S.A.**

EXPORT OFFICE  
100 EAST 42 ND ST.  
NEW YORK

OWNED AND OPERATED BY  
SAVAGE ARMS CORPORATION  
UTICA, N.Y.

April  
27th  
1933

County Commissioners,  
Court House,  
Springfield, Mass.

Gentlemen:

We are in receipt of your letter of April 26th  
in regard to the condition of the drain pipe foundation of  
the dam on our property.

We will give this matter our immediate attention  
and will have the necessary work completed within the coming  
week.

Yours very truly,

J. STEVENS ARMS COMPANY

*G. N. Davidson*  
Works Manager

G.N.Davidson:CSH

April 26, 1933

J. Stevens Arms Company,  
86 Broadway,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"A two foot diameter drain or waste pipe extends through the foundation of the dam. The piers which supported the downstream end of this pipe have fallen down so that the pipe is now cantilevered out from the embankment. These piers should be replaced so that the pipe will be properly supported."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairmen.

\_\_\_\_\_

\_\_\_\_\_

This letter written  
in Mr. Tighe's office.

November 6, 1935

J. Stevens Arms Company,  
86 Broadway Street,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the city of Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him:

The wooden support or pier at or near the downstream end of the two foot waste pipe laid through the dam and for a distance of 35 feet below the toe, has collapsed and should be replaced. It would seem advisable to construct a permanent pier at this point. At present the pipe is supported only at one end and holds its position through cantilever action which subjects the pipe to unnecessary strain.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By Thos. J. Costello  
Chairman

Chas. W. Bray

Maurice G. Donahue

August 7, 1940

J. Stevens Arms Co.

Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on a tributary of Chicopee River in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"Some repairs are needed on the brick work in the downstream face of this structure over the steel waste pipe, where some of the bricks have fallen out of place."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_



December 8, 1948

J. Stevens Arms Co.  
86 Broadway  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your Process Water Dam in Chicopee Falls, Massachusetts, has been inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"In a recent inspection made of the J. Stevens Arms Co. Process Water Dam in Chicopee Falls, Massachusetts, it was found that the head gate well chamber is blocked up with trash and loose brickwork which should be removed so that flood waters can reach the overflow pipe."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By Charles W. Bray

Chairman

William Dwight

Thomas F. Sullivan

The original was mailed December 14, 1948, the day it was brought in to the Comms' office by Mr. Dwight who forgot to bring it in on Wednesday, Dec. 8, 1948. Comms here Dec. 14th to go on a hearing.

October 18, 1950

J. Stevens Arms Company  
86 Broadway  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your process water dam located just west of Broadway in Chicopee Falls has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"The entrance to the well chamber of the overflow pipe is plugged with debris, and should be cleaned."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Johnson & Johnson Dam



1926 Chicopee

Lower dam located on the Chicopee River.

City/Town	Chicopee
Dam	Johnson & Johnson Dam
Name	Johnson & Johnson
Water	Chicopee River

Page 20 of report

Johnson & Johnson,  
Chicopee Falls, Mass.

you are notified that your lower  
dam, located on the Chicopee River so called in that part of  
the City of Chicopee known as Chicopee Falls, etc.

"Its crest is not in very good condition  
and needs to be repaired. The stone masonry  
facing needs pointing, and a leak through  
the structure at a point about one hundred  
feet from its east end should be repaired."

Now, therefore, etc.

March 10, 1926

Johnson & Johnson,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your lower dam, located on the Chicopee River so-called in that part of the City of Chicopee known as Chicopee Falls, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"Its crest is not in very good condition and needs to be repaired. The stone masonry facing needs pointing, and a leak through the structure at a point about one hundred feet from its east end should be repaired."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_

November 24, 1926

Johnson & Johnson,  
Chicopee Falls, Mass.

Gentlemen:

Inasmuch as your dams were inspected quite recently by our Engineer who found that no repairs had been made thereon, your attention is called to the notices sent to you on March 10, 1926 of which copies are herewith enclosed.

In case you would like further information regarding the repairs required than that contained in the notices, should you communicate or call upon our Engineer, James L. Tighe of the firm of Tighe & Bond, 189 High St., Holyoke, Mass., he will be glad to advise you.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

C/N  
Encs.

Lamieux Brothers Dam



1926 Chicopee

Located on a small tributary of the Chicopee River. See also: County Highways "Dam for John Lamieux near Granby Road" ch03106 & ch05061; "Dam of Lucien Lamieux" ch 10115.

City/Town	Chicopee
Dam	Lamieux Brothers Dam
Name	Lamieux Brothers
Water	Chicopee River

Samuel Brothers

Granby Road,

Chicopee, Mass.

you are notified that your  
dam, located on a small tributary to the Chicopee River so  
called in the City of Chicopee, etc.

"It is recommended that a surface  
spillway or overflow be added to the  
structure in order to increase its factor  
of safety against flood water topping it."

Now, therefore, etc.



March 10, 1926

Lamieux Brothers,  
Granby Road,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam located on a small tributary to the Chicopee River so-called in the City of Chicopee, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"It is recommended that a surface spillway or overflow be added to the structure in order to increase its factor of safety against flood water topping it."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

Granby Road,  
Chicopee, Mass.

Gentlemen:

A notification was sent to you on March 10th last relative to the condition of your dam, a copy of which is hereto attached.

Inasmuch as your dam was inspected again quite recently by our engineer and that he found that no repairs had as yet been made on the structure, your attention is called to Sections 47 and 48 of Chapter 253 of the General Laws as amended by Sections 3 and 4 of Chapter 178 of the Acts of 1924, which are as follows:

Section 47. "If after notice in writing to the owner of a reservoir or dam which has been so examined and adjudged to be unsafe, the said owner refuses or neglects to make such alterations or repairs as the commissioners order, they may, at the expense of the county, cause such reservoir or dam to be altered and repaired or any part thereof removed or the water drawn off, whichever they may consider necessary for the safety of life, property, roads or bridges on the stream below. After such removal, no structure shall be erected except in compliance with the three preceding sections, and after the water has been drawn off, the reservoir shall not be filled again until the orders of the commissioners have been complied with."

Section 48. "The Commissioners shall make such orders as they may deem just as to the payment by the owner, county or other party of the costs and expenses incurred by them under the three preceding sections, and if the reservoir or dam was adjudged to be unsafe, said costs and expenses may be ordered paid by the owner, with interest, from the time they were paid by the county. Notice shall be given the County Treasurer and the owner or other party of the amount due the county."

If the order of the commissioners is not complied with, the commissioners will be forced to proceed in the manner above authorized.

Yours very truly,

COUNTY COMMISSIONERS.

By \_\_\_\_\_  
Chairman.

November 17, 1926

Lamieux Brothers,  
Granby Road,  
Chicopee, Mass.

Gentlemen:

A notification was sent to you on March 10th last relative to the condition of your dam, a copy of which is hereto attached.

Inasmuch as your dam was inspected again quite recently by our engineer and that he found that no repairs had as yet been made on the structure, your attention is called to Sections 47 and 48 of Chapter 253 of the General Laws as amended by Sections 3 and 4 of Chapter 178 of the Acts of 1924, which are as follows:

Section 47. "If after notice in writing to the owner of a reservoir or dam which has been so examined and adjudged to be unsafe, the said owner refuses or neglects to make such alterations or repairs as the commissioners order, they may, at the expense of the county, cause such reservoir or dam to be altered and repaired or any part thereof removed or the water drawn off, whichever they may consider necessary for the safety of life, property, roads or bridges on the stream below. After such removal, no structure shall be erected except in compliance with the three preceding sections, and after the water has been drawn off, the reservoir shall not be filled again until the orders of the commissioners have been complied with."

Section 48. "The Commissioners shall make such orders as they may deem just as to the payment by the owner, county or other party of the costs and expenses incurred by them under the three preceding sections, and if the reservoir or dam was adjudged to be unsafe, said costs and expenses may be ordered paid by the owner, with interest, from the time they were paid by the county. Notice shall be given the County Treasurer and the owner or other party of the amount due the county."

November 17, 1926

Lamieuz Brothers, - 2

If the order of the commissioners is not complied with, the commissioners will be forced to proceed in the manner above authorized.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_

C/N

Langwald Dam aka Langewald Dam



o Chicopee

See Also: Dam Report Section - Chicopee. See also: County Highways "Langewald Dam" & "Fairview Dam" - ch05066, ch05069, ch05072, ch05074, ch05076 & ch05078. See also: County Highways - "Langewald Wading Pool Dam" - ch08068.

City/Town                      Chicopee

Dam	Langewald Dam
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Dam                      Langewald Dam

CHICOPEE  
D05020

LANGWALD DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

Fortier Dam



1926 Chicopee

Located on small tributary to the Chicopee River.

City/Town	Chicopee
Dam	Fortier Dam
Name	Fortier, Lawrence
Water	Chicopee River

Page 17. of report

Lawrence Fortin

11 Helen Ave.,

Chicopee, Mass.

you are notified that your dam,  
located on a small tributary to the Chicopee River or called  
in the City of Chicopee, etc.

"To increase the factor of safety,  
against flood water topping the  
embankment, it is recommended  
that a small surface overflow or  
swale be provided."



April 28, 1926

Mr. Lawrence Fortier,  
11 Helen Ave.,  
Chicopee, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary to the Chicopee River so-called, in the City of Chicopee, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"To increase the factor of safety, against flood water topping the embankment, it is recommended that a small surface overflow or swale be provided."

Yours very truly,

COUNTY COMMISSIONERS

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Chairman.

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Massachusetts Comm Natural Resources Dam - Toe Dam



o Chicopee

Also see: Dam Report Section - Chicopee.

Abutters	Cooley Brook Park
Dam	Massachusetts Comm Natural Resources Dam - Toe Dam
Name	Massachusetts Comm Natural Resources
Water	Cooley Brook

CHICOPEE  
D05022

MASSACHUSETTS COMM NATURAL RESOURCES DAM –  
TOE DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

Massachusetts Comm Natural Resources Dam - Upper Dam



o Chicopee

Also see: Dam Report Section - Chicopee.

Abutters	Cooley Brook Park
City/Town	Chicopee
Dam	Massachusetts Comm Natural Resources Dam - Upper Dam
Name	Massachusetts Comm Natural Resources
Name	Chicopee Water Department
Water	Cooley Brook

CHICOPEE  
D05023

MASSACHUSETTS COMM DEPARTMENT OF NATURAL  
RESOURCES – UPPER DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

Messer Dam fka Lemieux Dam



1933 Chicopee

Located on a tributary of the Chicopee River northerly of Granby Road in the Sand Hill section. See Also: Messer Dam.

City/Town	Chicopee
Dam	Lemieux Dam
Dam	Messer Dam
Name	Trevallion, Douglas M
Name	Ham Hill Developers, Inc.
Name	Messer, Margaurite C
Name	Lemieux, Lucien
Streets	Granby Road
Water	Chicopee River

April 26, 1932

Mr. Lucien Lemieux,  
Granby Road,  
Chicopee, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"The wood sluice-overflow at the north end of the dam should be cleaned of leaves, debris, etc. It is also recommended that the trees growing on the dam be cut down."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairmen.

\_\_\_\_\_  
\_\_\_\_\_

This letter written in Mr. Tighè's  
office.

November 5, 1935

Mr. Lácien Lamieux  
Granby Road  
Chicopee, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam located on a small tributary of the Chicopee River in the city of Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him:

There are two washouts on the downstream slope of the embankment towards the east end of the dam apparently caused by surface water from the natural slopes of the ground abutting.

To put the embankment back in its original condition these washouts should be filled in with gravel or a gravelly material thoroughly tamped in place. In order that the surface water will not affect the embankment again it should be diverted by a ditch or swale to a point below the toe of the embankment.

Now in accordance with section 46 of said Chapter 253 it is ordered that the above recommendation be complied with on or before December 1st, 1935.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours truly,

COUNTY COMMISSIONERS

Thos. J. Costello  
Chairman

Charles W. Bray

Maurice G. Donahue



August 7, 1940

Mr. Lucien Lemieux  
Granby Road  
Chicopee, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on a tributary of Chicopee River in Chicopee has been inspected by our engineer, and your attention is called to the following conditions noted and recommendations made by him:

"To make this structure more safe, the south bank of the overflow channel, from the end of the concrete part of the channel downstream, should be raised, at least, a couple of feet more, for a distance of fifty feet; also, the down stream slope strengthened by making the top part of the slope the same as the lower part, that is, 1 on  $2\frac{1}{2}$  approximately."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

JAMES L. TIGHE  
PHILIP E. BOND  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

August 23, 1949

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Thomas F. Sullivan, Chairman

Gentlemen:

The dams in the Chicopee and Ludlow area have been inspected for any possible damage caused by the heavy fall of rain on the night and morning of Aug. 12 and 13, 1949.

The inspection made at the H. T. Messer Dam located on a small tributary of the Chicopee River at a point a short distance upstream from the Davitt Memorial Bridge at Chicopee Center, revealed that the downstream end of the stone masonry spillway channel had been washed out. This damage should be repaired immediately to prevent further destruction of the spillway channel.

All other dams inspected were found to be in a satisfactory condition.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Philip E. Bond", is written over a horizontal line.

September 21, 1949

H. T. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that the dam belonging to you and located off Mill Road in the southwest portion of Hampden has been inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The inspection made at the H. T. Messer Dam located on a small tributary of the Chicopee River at a point a short distance upstream from the Davitt Memorial Bridge at Chicopee Center, revealed that the downstream end of the stone masonry spillway channel had been washed out. This damage should be repaired immediately to prevent further destruction of the spillway channel."

Yours very truly,

COUNTY COMMISSIONERS

By Thomas F. Sullivan  
Chairman

Charles W. Bray

William F. Stapleton

October 18, 1950

Mr. H. T. Messer  
100 Granby Road  
Chicopee, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located off Granby Road near your home in Chicopee has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"The end of the spillway channel has been partly washed out and repairs are necessary to prevent further damage to the structure."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

November 19, 1952

Mrs. Margaurite C. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Madam:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of Granby Road in the Sandy Hill section of Chicopee, has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"The spillway on this dam has been delapidated for some time, and in the past this condition has been called to the attention of the owner. The condition of the spillway is such at the present time that it is no longer safe and it should be repaired immediately, or the pond drawn down. The end of the spillway channel has been washed out and has now collapsed back to a point where the earth fill of the dam is beginning to be washed away by heavy spillway flows. The side walls of the spillway channel at the top of the dam are collapsing inward and continued earth pressure and frost action may cause these walls to fail completely."

You are directed to begin work on the repair of the spillway immediately, and if work can not be started within 10 days, the pond is to be drawn down and the draw-off gate kept open until such time as the spillway repairs can be completed.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By                     

Chairman

**TIGHE & BOND**

*Formerly  
Lucien Lemieux  
Dam*

March 17, 1953

**COPY**

Mrs. Margaurite C. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Madam:

The undersigned has recently inspected your dam located northerly of Granby Road in Chicopee. In regard to the letter from the County Commissioners of November 19, 1952, the work of drawing down your pond was completed satisfactorily, and as you probably know with considerable difficulty. At the present time the dam is again storing water, probably due to the fact that debris has blocked the draw-off pipeline. This debris could have entered the pipeline accidentally, but from the experience we have had when the work of drawing the pond down was going on, I feel quite certain that any debris in the pipeline was probably placed there by children playing in the area.

The draw-off pipeline should be investigated to determine the reason for the ponding of the water, and this work could probably best be done by using a cleaning rod from the down stream side of the dam.

From past experience at this dam, and other dams under similar conditions, it would seem that you would have difficulty in maintaining the pond drawn down unless the draw-off pipe inlet is properly protected and inspected frequently. If the dam is of no further value to you, the simplest solution to your problem would be to breach the structure after the pond is emptied again. If you intend to maintain the dam, it would be advisable to make the proper repairs as soon as possible.

I will be glad to go to West Springfield at any time to discuss this problem with you.

Very truly yours,

TIGHE & BOND

**COPY**

G.H. McDonnell  
County Hydraulic Engineer

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

TIGHE & BOND  
CONSULTING ENGINEERS  
GEORGE H. McDONNELL, PROP.  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

March 17, 1953

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:

Enclosed for your information and files is  
a copy of correspondence sent to Mrs. Margaurite Messer  
on her dam. This is a follow up letter and is in  
regard to the work as directed by your board in your  
letter to Mrs. Messer of November 19, 1952.

Very truly yours,

TIGHE & BOND

  
G.H. McDonnell  
County Hydraulic Engineer

ghm/al

encl.

*Formerly Lucien Lemieux Dam.  
Chicopee*

*Formerly  
Lucien Lemieux  
Dam*

7

November 17, 1954

Mrs. Margaurite C. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Madam:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located north-erly of Granby Road in the Sandy Hill section of Chicopee, has been recently inspected by our Engineer, and your attention is called to the following condi-tions noted and recommendations made by him:

"At the present time the draw-off pipe is open and no pond is being formed. There exists the possibility of this pipeline becoming plugged from debris and the forming of a pond during time of heavy run-off. If this dam is not to be used in the future for the purpose of impounding water, it would be advisable to breach the structure to allow free flow of the small brook through the dam, and thus eliminate any danger of water ponding because of blockage of the drain pipe."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_



WATER SUPPLY

SEWERAGE

SEWAGE DISPOSAL

STRUCTURAL ENGINEERING

**TIGHE & BOND  
CONSULTING ENGINEERS**

GEORGE H. McDONNELL, PROP.

189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

September 28, 1955

DAMS & POWER INSTALLATIONS

HIGHWAYS & BRIDGES

HOUSING DEVELOPMENT

WASTE DISPOSAL

C-D

The Hon. the Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

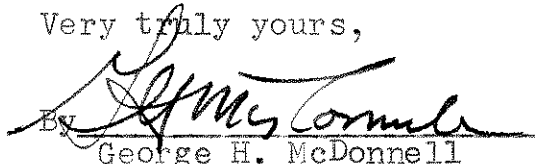
Gentlemen:

An examination of dams in Hampden County shows that the dam of Margaurite C. Messer, located in Chicopee just northerly of the Granby Road, in the vicinity of Sandy Hill, is still in the same state of disrepair as reported previously.

As a result of previous reports regarding the dilapidated spillway and the dangerous condition of the spillway channel, the Owner drew down the dam and no longer maintains a pond behind the dam. In the past we have pointed out to the Owner that though no water is ponded behind the dam, there always exists the possibility that the drain pipe through the dam may become plugged, and water could again accidentally become ponded behind the dam. It has been pointed out to the Owner that if she does not intend to repair the dam, then the structure should be breached by excavating a wide hole through the dam, so that no water will ever again pond behind the dam, even if the drain pipe should become plugged.

The dam has not been breached, nor has the spillway been repaired. It is recommended that the Owner of the dam be notified that the dam must either be properly breached or the spillway put into condition whereby it could safely pass the overflow of water, should the drain pipe become plugged.

Very truly yours,

  
By \_\_\_\_\_  
George H. McDonnell

County Hydraulic Engineer

GHM\*emm

October 5, 1955

Mrs. Margaurite C. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Madam:

In accordance with the provisions of Chapter 253 of the General Laws of the Commonwealth of Massachusetts, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of Granby Road in the Sandy Hill section of Chicopee has been recently inspected by our Engineer, and your attention is called to the fact that the spillway on this dam has not been repaired, nor has the dam been breached.

In order to guarantee the safety of persons and property downstream of the dam, it is necessary that this dam be repaired and placed in proper and safe condition, or that the breach be cut through the structure so that no water can be ponded behind the dam. As conditions now exist at the dam, debris could block the pipe through the dam and water could pond behind the structure and pass over the dilapidated spillway. Such an occurrence would endanger the safety of the structure and might cause its failure. Failure of this dam with a pond of water behind this structure could result in the loss of lives and damage to property downstream.

The above facts have been pointed out to you in previous communications, and you have been requested to take action either in repairing or in breaching the dam. Will you kindly notify this office within thirty (30) days of this date as to your intentions regarding your dam, and whether or not the structure will be breached or properly repaired. The breaching or repairing of the structure should take place before December of 1955.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF WATER COMMISSIONERS

By \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C-D Chicopee

December 29, 1955

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Mass.

COPY

Gentlemen:

The undersigned on Wednesday, December 21, 1955, inspected the dam of Mrs. Maragurite C. Messer, located northerly of Granby Road in the Sandy Hill section of Chicopee. This dam has been in dilapidated condition for some time and in the past Mrs. Messer has been requested to take action to either repair the dam or to breach the structure so that no pond could form behind the dam.

On September 28, 1955, a report was sent to your Honorable Board by the undersigned, recommending that the owner of the dam be notified that the dam must either be properly breached or the spillway put into condition whereby it could safely pass the overflow of water should the drain pipeline become plugged. According to our records, your Honorable Board notified Mrs. Messer on October 5, 1955, of the condition at her dam and she was requested to notify your office within thirty days as to her intentions regarding the dam and that the dam should be breached or the spillway structure repaired before December of 1955. The recent inspection by the undersigned shows that no work has been done on this structure.

It is suggested that a registered letter, return receipt, be sent to Mrs. Margaurite C. Messer, directing her to either repair the spillway of the dam or to breach the dam. Her failure to take action would necessitate action by the County under Chapter 253 of the General Laws.

As I interpret the General Law, I assume that action would be taken by your Board under Section 47 of Chapter 253. Anything that you wish the undersigned to do in connection with the removal of this dam will be carried out upon your request.

Respectfully submitted,

COPY

GHM/emm

George H. McDonnell  
County Hydraulic Engineer

C-D Chicopee

December 29, 1955

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Mass.

Gentlemen:

COPY

The undersigned on Wednesday, December 21, 1955, inspected the dam of Mrs. Maragurite C. Messer, located northerly of Granby Road in the Sandy Hill section of Chicopee. This dam has been in dilapidated condition for some time and in the past Mrs. Messer has been requested to take action to either repair the dam or to breach the structure so that no pond could form behind the dam.

On September 28, 1955, a report was sent to your Honorable Board by the undersigned, recommending that the owner of the dam be notified that the dam must either be properly breached or the spillway put into condition whereby it could safely pass the overflow of water should the drain pipeline become plugged. According to our records, your Honorable Board notified Mrs. Messer on October 5, 1955, of the condition at her dam and she was requested to notify your office within thirty days as to her intentions regarding the dam and that the dam should be breached or the spillway structure repaired before December of 1955. The recent inspection by the undersigned shows that no work has been done on this structure.

It is suggested that a registered letter, return receipt, be sent to Mrs. Margaurite C. Messer, directing her to either repair the spillway of the dam or to breach the dam. Her failure to take action would necessitate action by the County under Chapter 253 of the General Laws.

As I interpret the General Law, I assume that action would be taken by your Board under Section 47 of Chapter 253. Anything that you wish the undersigned to do in connection with the removal of this dam will be carried out upon your request.

Respectfully submitted,

COPY

GHM/amm

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George H. McDonnell  
County Hydraulic Engineer

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL  
C-D Chicopee

December 29, 1955

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Mass.

Gentlemen:

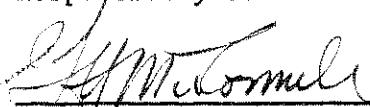
The undersigned on Wednesday, December 21, 1955, inspected the dam of Mrs. Maragurite C. Messer, located northerly of Granby Road in the Sandy Hill section of Chicopee. This dam has been in dilapidated condition for some time and in the past Mrs. Messer has been requested to take action to either repair the dam or to breach the structure so that no pond could form behind the dam.

On September 28, 1955, a report was sent to your Honorable Board by the undersigned, recommending that the owner of the dam be notified that the dam must either be properly breached or the spillway put into condition whereby it could safely pass the overflow of water should the drain pipeline become plugged. According to our records, your Honorable Board notified Mrs. Messer on October 5, 1955, of the condition at her dam and she was requested to notify your office within thirty days as to her intentions regarding the dam and that the dam should be breached or the spillway structure repaired before December of 1955. The recent inspection by the undersigned shows that no work has been done on this structure.

It is suggested that a registered letter, return receipt, be sent to Mrs. Margaurite C. Messer, directing her to either repair the spillway of the dam or to breach the dam. Her failure to take action would necessitate action by the County under Chapter 253 of the General Laws.

As I interpret the General Law, I assume that action would be taken by your Board under Section 47 of Chapter 253. Anything that you wish the undersigned to do in connection with the removal of this dam will be carried out upon your request.

Respectfully submitted,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/emm

January 4, 1956

Mrs. Margaurite C. Messer  
188 Windsor Street  
West Springfield, Mass.

Dear Mrs. Messer:

In accordance with our letter to you of October 5, 1955, pertaining to your dam located northerly of Granby Road in the Sandy Hill section of Chicopee, we have not been notified by you, as requested therein, as to your intentions regarding this dam. As you know, this dam must either be repaired and made safe by the reconstruction of the spillway or the earth dam must be breached so that no ponding of water can take place should the drain pipeline become plugged.

In our letter of October 5, 1955, you were requested to either repair or breach the structure before December 1955.

Our County Hydraulic Engineer has made an inspection of your dam and finds that no work has been done on the spillway and that no action has been taken regarding the breaching of the dam.

In view of this fact, it becomes necessary for this Board to take action under Chapter 253 of the General Laws. You have been given notice in writing that the dam has been examined and that alterations and repairs are necessary if the structure is to remain or that water can be impounded. By your failure to answer our letter of October 5, 1955, we must conclude that you either refuse or have neglected to take proper action in connection with this dam, and therefore it becomes necessary for this Board to proceed under Section 47 and 48 of Chapter 253 of the General Laws. Under Chapter 47 the County would remove the earth portion of the dam to a sufficient width to guarantee that no pond of water will take place. Under Section 48 the County is authorized to take steps to have the cost of said work paid for by the Owner.

Unless definite word is received from you either by mail or by personal visit to the office of this Board on or before Wednesday, January 18, 1956, that you will properly repair the dam or breach the structure within a reasonable time, the County shall employ equipment and personnel to remove a portion of your dam, and will take action under Section 48 of Chapter 253 of the General Laws to obtain reimbursement for the cost of this work from the owner of the dam.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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9 January 1956

County Commissioners  
37 Elm Street  
Springfield, Mass.

Gentlemen:

In answer to your registered certified letter received 7 Jan 56 please be advised that Chicopee property on Lawrence and Granby Road formerly owned by me has changed hands twice in the last 2 years. When the property belonged to me I went to a great deal of expense to have the repairs made on the pond. This was done at your request. Since then I do not recall having received any requests for repairs. The letter you mentioned in your letter to me just received, was not received by me. Having moved in April from 188 Windsor Street to 72 Exeter Street in West Springfield have had some trouble about mail being delivered to the old address and not being forwarded.

The Chicopee property in question was bought about August of 1955 by the Ham Hill Corporation, Douglas M. Trevallion is President of the Corporation. His address is 2444 Boston Road, Wilbraham, Mass., Telephone LY 6-4543. He bought the property intending to develop and cut up in lots. I am sure he will be glad to have his engineers breach the dam.

I hope this explains everything to your satisfaction.

Sincerely yours,

*Margaret C. Messer*  
MARGARET C. MESSER

Address:  
72 Exeter Street  
West Springfield, Mass.

Jan. 17, 1956

The Hon. the Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Gentlemen:

In connection with the case of Margaret C. Messer, formerly owner of the dam in Chicopee Center off of Granby Road, Margaret C. Messer has notified your Board that the property in question is now owned by the Ham Hill Corporation, Douglas M. Trevallion, President, 2444 Boston Road, Willibraham, Mass.

In view of our latest communication to Margaret Messer, it is recommended that the Ham Hill Corporation be notified of the condition at the dam and that steps be taken within a reasonable time to either properly repair the dam or breach the structure.

Respectfully submitted

George H. McDonnell  
County Hydraulic Engineer

**COPY**

GHM:cmb



WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

Jan. 17, 1956

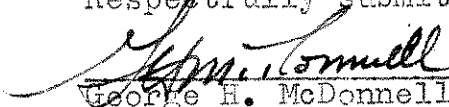
The Hon. the Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Gentlemen:

In connection with the case of Margaret C. Messer, formerly owner of the dam in Chicopee Center off of Granby Road, Margaret C. Messer has notified your Board that the property in question is now owned by the Ham Hill Corporation, Douglas M. Trevallion, President, 2444 Boston Road, Willibraham, Mass.

In view of our latest communication to Margaret Messer, it is recommended that the Ham Hill Corporation be notified of the condition at the dam and that steps be taken within a reasonable time to either properly repair the dam or breach the structure.

Respectfully submitted

  
George H. McDonnell  
County Hydraulic Engineer

GHM:cmb

Jan. 18, 1956

Ham Hill Corporation,  
244 1/2 Boston Road  
Wilbraham, Mass.

Att: Douglas M. Trevallion, Pres.

Gentlemen:

In accordance with the provisions of Chapter 253 of the General Laws of the Commonwealth of Massachusetts, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of Granby Road in the Sandy Hill section of Chicopee, formerly owned by Margaret C. Messer is in need of maintenance and repair.

In order to guarantee the safety of persons and property downstream of the dam, it is necessary that this dam be repaired and placed in proper and safe condition, or that a breach be cut through the structure so that no water can be ponded behind the dam. As conditions now exist at the dam, debris could block the pipe thru the dam and water could pond behind the structure and pass over the dilapidated spillway. Such an occurrence would endanger the safety of the structure and might cause its failure. Failure of this dam with a pond of water behind this structure could result in the loss of lives and damage to property downstream.

Will you kindly notify this Board of your intentions regarding this structure? Do you plan to repair the structure or will you abandon it and breach the embankment? It is requested that you inform the Board of your intentions by February 1st, 1956.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

By \_\_\_\_\_

Jan. 18, 1956

Ham Hill Corporation,  
2444 Boston Road  
Wilbraham, Mass.

Att: Douglas M. Trevallion, Pres.

Gentlemen:

In accordance with the provisions of Chapter 253 of the General Laws of the Commonwealth of Massachusetts, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of Granby Road in the Sandy Hill section of Chicopee, formerly owned by Margaret C. Messer is in need of maintainence and repair.

In order to guarantee the safety of persons and property downstream of the dam, it is necessary that this dam be repaired and placed in proper and safe condition, or that a breach be cut through the structure so that no water can be ponded behind the dam. As conditions now exist at the dam, debris could block the pipe thru the dam and water could pond behind the structure and pass over the dilapidated spillway. Such an occurrence would endanger the safety of the structure and might cause its failure. Failure of this dam with a pond of water behind this structure could result in the loss of lives and damage to property downstream.

Will you kindly notify this Board of your intentions regarding this structure? Do you plan to repair the structure or will you abandon it and breach the embankment? It is requested that you inform the Board of your intentions by February 1st, 1956.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

By \_\_\_\_\_

# HAM HILL DEVELOPERS, Inc.

SOUTHWICK, MASSACHUSETTS

February 7, 1956

Office of County Commissioners  
Court House Building  
Springfield 2, Massachusetts

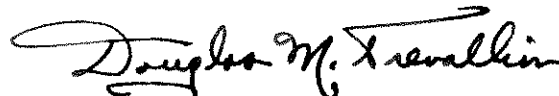
Dear Sir:

In reference to your letter to the Ham Hill Developers, Inc. dated January 18, 1956 concerning the dam in the Sand Hill area of Chicopee.

We will breach this dam as you have requested. However, with the ground frozen at the present time, this would be most difficult. With your permission we will wait until the ground thaws.

Thank you.

Very truly yours,

 Pres.

Ham Hill Developers, Inc.

Copy of this letter sent to  
George H. McDonnell, County Hydraulic  
Engineer, on Feb. 11, 1956.

DMT/ck

C-D Chicopee

February 17, 1956

Ham Hill Developers, Inc.  
Southwick,  
Mass.

Attention Mr. Douglas M. Trevallion, Pres.

Gentlemen:

The County Commissioners of Hampden County have received your letter of February 7, 1956, regarding the dam in the vicinity of Granby Road in Chicopee, and have instructed me to answer your letter.

Breaching of your dam will probably be done with mechanical equipment. Consequently, a small depth of frost should not hinder the work of excavating a breach through the dam. Experience on excavation during the last week or two indicates that the frost generally is not too thick at the present time and that in nearly every instance mechanical equipment has easily removed the layer of frost. Most of the excavation that will be required in the dam will be frost-free excavation and once a hole is excavated thru the frost, the remaining frost layer can easily be broken out as the ground and earth embankment thereunder is excavated.

Since it is advisable that the breach through the dam be made in advance of heavy spring run-off conditions, the early breaching of this structure is desirable. If possible, the work should be accomplished within the next ten days to two weeks. By that time, the frost depth should be decreased further and the work should be accomplished with ease.

Will you kindly notify the undersigned or the Board of County Commissioners when you expect to start the work so that the undersigned may inspect it during its progress and offer advice as to the final shape and size of the breach through the embankment.

Very truly yours,

GHM/emm

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George H. McDonnell  
County Hydraulic Engineer

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL  
C-D Chicopee

February 17, 1956

The Hon. the Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.


Gentlemen:

Enclosed for your information and file purposes, please find a copy of a letter sent to the Ham Hill Developers, Inc. of Southwick, Mass., attention of Douglas M. Trevallion, President, in answer to his letter of February 7, 1956, to your Board.

I think the time limit allowed in my letter is reasonable and I believe that Mr. Trevallion will find that excavation of the embankment will be a relatively simple matter once a small hole is broken through the frost. The great majority of the excavation will be non-frozen earth and the frost problem should only delay the excavation for a fraction of an hour during the first day of the embankment breaching.

Very truly yours,

GHM/emm  
enc.

  
George H. McDonnell  
County Hydraulic Engineer

WATER SUPPLY

SEWERAGE

SEWAGE DISPOSAL

STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**

189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS

HIGHWAYS & BRIDGES

HOUSING DEVELOPMENT

WASTE DISPOSAL

C. D.-Chicopee

February 29, 1956

The Hon. The Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Massachusetts

Gentlemen:

In reference to the case of the old Messer Dam off Granby Rd. in Chicopee, I have been notified by the present owners, the Ham Hill Corporation of Southwick, that the old dam will be destroyed by breaching starting Wednesday, Feb. 29, 1956. With the completion of this work, this will eliminate the old Messer Dam.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHB/mbb

COPY

C.D.-Chicopee

March 2, 1956

Ham Hill Corporation  
Southwick, Massachusetts

Gentlemen:

On Wednesday afternoon, February 29, 1956, I inspected the site of your dam off Granby Road in Chicopee. This is the old Messer Dam.

At the inspection I noted that you had attempted to excavate a breach through the dam of the left end of the Dam in natural ground in the vicinity of the old burned wooden building. Frost conditions apparently prevented the earth moving equipment from excavating a deep breach that would prevent ponding of water should the drain through the Dam become plugged. Part of the trouble in attempting to excavate the breach appears to have been the depth of frost.

It can be expected that the frost depth will diminish rapidly with the coming of warm days and I would think that within the next two weeks it would be possible to attempt to breach again.

In breaching the structure, it would probably simplify the work if the earth moving equipment could attack the embankment further to the north and approach the embankment from the pond side at about pond level.

I know the slope of the embankment is steep and that the material is clay like in nature and will consequently be quite slippery. However, by careful maneuvering and with the proper equipment it would seem that the work could be accomplished.

Depending upon weather conditions I would think that the breaching could be tried again approximately on March 15.

Very truly yours,

George H. McDonnell  
County Hydraulic Engineer

GHM/mbb



WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

C.D.-Chicopee


March 2, 1956

The Hon. The Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Massachusetts

Gentlemen:

Enclosed for your information and file purposes  
please find a letter written to the Ham Hill Corporation  
relative to the breaching of the old Messer Dam off Granby  
Road in Chicopee. The contents of the letter are self  
explanatory.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mdb

February 1, 1956

Received telephone call from

Douglas Trevallion in re: letter concerning his dam. He stated that he intended to breach the dam and

wanted to know if this would be satisfactory.

Ralph P. Walsh

This is the Messer Dam in Chicopee.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

CD-Chicopee


April 17, 1956.

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Massachusetts

Gentlemen:

Enclosed for your information and file purposes please find copies of communications sent out in regard to the old Messer Dam in Chicopee now owned by the Ham Hill Corporation, and in regard to the old dam at Bemis Pond in Szot Park in Chicopee. The enclosed are self explanatory.

Very truly yours

  
George H. McDonnell  
County Hydraulic Engineer

Enc.  
GHM/cmb

CD-Chicopee

April 17, 1956

COPY

City of Chicopee  
Office of the City Engineer  
City Hall  
Chicopee, Massachusetts

Att. Thomas F. Robinson  
City Engineer

Gentlemen:

As County Hydraulic Engineer for Hampden County, I made an inspection of the old dam on Bemis Pond in Szot Park. This dam is in relatively the same condition as it has been since the flood of August 1955. It is possible that the City of Chicopee will be desirous of using Bemis Pond bathing area during the coming summer months. Consequently, necessary improvements and repairs to the old dam should be started in the very near future if the structure is to be used for the purpose of ponding water. I am calling this to your attention so that initial steps may be taken, if desired, by the officials of Chicopee for the repairing and improvement of the dam in advance of the summer season.

If I can be of any assistance to you in this matter or if you or any of the City Officials having to do with this dam wish to discuss the matter, I will be glad to meet with you and these officials at your convenience.

Very truly yours

George H. McDonnell

County Hydraulic Engineer

GHM/omb

COPY

COPY

CD-Chicopee

April 17, 1956

Ham Hill Developers, Inc.,  
Southwick, Massachusetts

Att: Douglas M. Trevallion, Pres.

Gentlemen:

I have inspected the breaching of the dam in Chicopee off of Granby Road and find that the work has been accomplished in part but the breach has not been made sufficiently deep to prevent ponding of water.

As a result of the weekend rainfall a pond of water has been formed to the depth below the grade of the bottom of the breach.

Ponded water has risen to the grade of the breach and has flowed across the breach. In so doing embankment fill has been washed into the brook.

The breach should be deepened sufficiently to prevent ponding of water or the pond should be filled to eliminate the storage volume. As now existing, damage downstream could be caused by failure of the embankment in time of heavy storm runoff or by embankment material washed downstream.

Will you kindly take the necessary steps to eliminate the ponding of water behind the dam embankment?

Very truly yours

George H. McDonnell

County Hydraulic Engineer

GEM/cmb

Oxford Country Club Dams - Upper & Lower



1933 Chicopee

Two dams located on Poor Brook.

City/Town	Chicopee
Dam	Oxford Country Club Dams - Upper & Lower
Name	Oxford Country Club
Water	Poor Brook

Page 16 of report.

Odford Country Club,  
Chicopee Falls, Mass.

you are notified that your  
lower dam, located on Poor Brook so called  
in that part of the City of Chicopee known as  
Chicopee Falls, etc.

"It is an earthen embankment  
about one hundred feet in length and  
about seven feet in height. It is not in  
very good condition as the plank retaining  
walls of the spillway, which is located in  
the structure, are falling in. These  
should be repaired if the pond is to be  
maintained.

Inasmuch as the pond is very  
small and practically on the bank of  
the Chicopee River, even if total failure  
of the structure occurred, no damage  
would be done by the released water."

March 24, 1926

Oxford Country Club,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your lower dam, located on Poor Brook so called in that part of the City of Chicopee known as Chicopee Falls, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"It is an earthen embankment about one hundred feet in length and about seven feet in height. It is not in very good condition as the plank retaining walls of the spillway, which is located in the structure, are falling in. These should be repaired if the pond is to be maintained.

Inasmuch as the pond is very small and practically on the bank of the Chicopee River, even if total failure of the structure occurred, no damage would be done by the released water."

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.



April 26, 1933

Oxford Country Club,  
East Main Street,  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your two dams, located on Poor Brook, so called, in the City of Chicopee, have been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"On both dams there are some minor repairs needed to the planked aprons attached to the spillways. These aprons should be put in shape to prevent any erosion at the toes of the dams."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_

The Oxford Country Club

Chicopee Falls, Mass.

May 19, 1933.

Hampden County Commissioners,  
Springfield, Mass.

Gentlemen :

In reference to your recent communication addressed to the The Oxford Country Club, want to say in reply that the necessary repairs on Dams will be complied with.

We thank you for your observation and assure you that you will find the Dams in good repair on next inspection .

Very truly yours,

The Oxford Country Club

*T. J. Bagley*  
Secretary.

December 10, 1952

Oxford Country Club  
651 E. Main Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dams at the Country Club have been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"A hole wash in the soil and store of the right side of the spillway flume on the downstream side of the dam should be filled and repaired."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

*Oxford Country Club Hqs. Mass.*

November 17, 1954

Oxford Country Club  
651 East Main St.  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your lower dam located on your Golf Club property in Chicopee Falls has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"A loose heavy plank caught in the spillway trough should be removed. The base of the spillway should be examined from time to time for any undermining that may occur at the end of the sloping planks."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_

\_\_\_\_\_

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

CD-Chicopee

April 25, 1956.


The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Massachusetts

Gentlemen: .

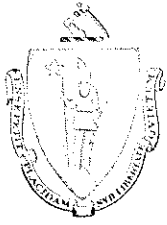
The undersigned recently inspected the dams of the Oxford Country Club in Chicopee Falls. The upper of these two dams was damaged and breached in the flood of 1955. To date this dam remains in its breached state and no work has been done to either take action towards the repair of the dam or proper cleaning and shaping of the breach. Debris from the breached area could be washed down stream and might endanger the public road below. The culvert under the road could be partly blocked by the debris.

It is recommended that the Oxford Country Club be notified of this condition and that the dam be either repaired or the breached area cleaned up, debris removed and the area shaped for flow of the brook thru the site of the dam.

Respectfully submitted

  
George H. McDonnell  
County Hydraulic Engineer

GHM/cmb



Commonwealth of Massachusetts  
County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
52 State Street

William F. Stapleton  
Chairman

Ralph H. Walsh  
Floyd W. Fradet

December 4, 1968

Oxford Country Club  
651 East Main Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of the Clubhouse building has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"This small dam is in relatively poor condition. Concrete at the right side of the spillway is cracked, broken and settled. The wooden plank portion of the structure is in fair condition. No flashboards are on the crest. Water level in storage was noted to be overflowing the crest.

Abutments of the footbridge passing over the spillway of the dam are undermined and shifting. On the whole, the spillway portion of the dam is quite dilapidated.

The earth embankment sections are in fair condition. They are hard and they are wide in relation to their low height. This dam would not come under County jurisdiction except for the fact that the drainage area is more than one square mile. Any sudden loss of the dam by failure of the spillway or breach of the embankment would do little or no property damage except to golf course property of the owner which lies between the dam location and the Chicopee River. However, a sudden loss might be dangerous to the safety of persons on the golf course immediately below the small dam.

COPY

It is recommended that the owner be advised of the deteriorating and dilapidated condition of the dam, particularly the masonry and foot-bridge abutments. "

Since the Chicopee River located a short distance to the north of your dam could easily absorb any flood flow caused by the breaking of the dam, there is always the possibility of injury to persons on the golf course or the loss of a life should this dam fail suddenly. The chance of this happening is very very slim. However, as long as there is a chance at all, it would seem advisable to keep the dam in a good state of repair. Also, by so doing, you would be protecting your investment in the pond and the dam.

Any further information concerning this matter which you may desire, will be furnished by this office upon request.

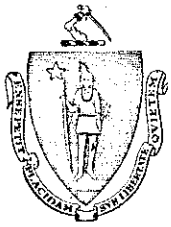
Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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Commonwealth of Massachusetts

# County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
52 State Street

William F. Stapleton  
Chairman

~~XXXX XXXXXX~~

Floyd W. Fradet

Stephen A. Moynahan

December 17, 1969

Oxford Country Club  
651 East Main Street  
Chicopee Falls, Massachusetts

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located northerly of the Clubhouse building has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"When inspected the pond was empty and the drawdown opening through the wooden dam was passing the full flow of the brook. The wooden timbers and planking forming the small dam were observed to be in fair condition.

The concrete cap on both sides of the wooden dam is cracked, broken and has settled. The settlement is no doubt the result of water leaking thru the abutment areas.

To prevent this condition for continuing, the abutment areas could be dug out and mass concrete placed to a depth which will provide suitable and sound foundation. In this way, the seepage through the area could be cut off and there should be little or no further settlement.

In the opinion of the undersigned, the dam is probably safe, in spite of the conditions existing on each side of the wooden structure. However, deterioration will continue and further



settlement might eventually lead to failure of the small foot bridge abutment at each side of the dam.

It is recommended that the owner be advised of conditions at this small dam so that repairs can be made if the owner so desires."

As pointed out in our letter report of last year, the chance of your small dam failing is very slim. However, the dam does need attention, to prevent further settlement of the stone fill at each side of the wooden structure. Loss of the dam would mean loss of the pond which is a desirable water hazard on the golf course. There would also be the possibility of injury to persons on the golf course downstream of the dam, should a sudden failure take place.

Any further information concerning this matter which you may desire, will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

BY: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

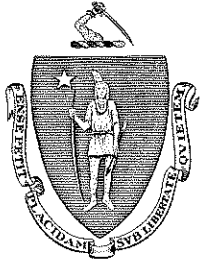
Quinnehtuk Company Dam fka Dwight Manufacturing Company Dam fka Chicopee Manufacturing Company Dam



1933 Chicopee

Located on the Chicopee River. See Also: "Chicopee River Dam" D05003. See Also: County Highways - "Chicopee Manufacturing Company Storage Reservoir Dam" - ch09029. See also: County Roads Plan #9 (1944) "Dismantle Dam in Chicopee Falls - Chicopee Manufacturing Company". See also County Roads Plan #12 (1947) "Dwight Dam".

City/Town	Chicopee
Dam	Chicopee Manufacturing Company Dam
Dam	Dwight Dam
Dam	Quinnehtuk Company Dam
Name	Western Massachusetts Electric Company
Name	Dwight Manufacturing Company
Name	Chicopee Manufacturing Company
Water	Chicopee River



Commonwealth of Massachusetts

# County of Hampden

Springfield, Mass.

April 26, 1933

Office of the  
County Commissioners

Thomas J. Costello  
Chairman

Charles M. Bray  
Maurice G. Donahue

Dwight Manufacturing Co.,  
Front Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following condition noted and recommendation made by him;

"On the downstream side west of the overflow, a portion of the embankment has been washed out. This washout should be re-filled with suitable material if the pond is to be maintained."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By Thomas J. Costello  
Chairman.

Charles M. Bray

Maurice G. Donahue

RAPHAEL SAGALYN  
PRESIDENT

H. W. CAMPBELL  
TREASURER

# INDUSTRIAL BUILDINGS CORPORATION

165 FRONT STREET

CHICOPEE, MASSACHUSETTS

April 27, 1933

To the County Commissioners  
Springfield, Mass.

Gentlemen:

Your letter of April 26th addressed to  
Dwight Mfg. Co., our predecessors in  
Chicopee **Has** been delivered to us.

As the waterpower and dams were some  
months ago transferred to the Quinnehtuk  
Co. we are returning your letter and  
would suggest that you refer the matter  
to them, at their Turners Falls, Mass.  
address.

Very truly yours,

*H. W. Campbell*  
Treas

# THE QUINNEHTUK COMPANY

CONSTITUENT OF WESTERN MASSACHUSETTS COMPANIES

ADDRESS REPLY TO:

Turners Falls, Mass.  
May 5, 1933.

Ref. #1160

Hampden County Commissioners  
Springfield  
Massachusetts

Gentlemen:

This is to advise you that we have no ownership of a dam or dams on any small tributaries of the Chicopee River in the City of Chicopee or elsewhere.

After receiving your letter of May 3rd on the above subject we conferred over the phone with Mr. J. L. Tighe, County Engineer, and from the information given us by him, we are quite sure that the specific dam referred to in your May 3rd letter is not in our ownership.

Yours very truly,

THE QUINNEHTUK COMPANY

  
C. F. Mosher  
General Superintendent

CFM-KDK

May 10, 1933 - Mr. Tighe stated he has talked with the rep. of this Company & was out with two others of the Chicopee Mfg. Co. so the matter is all straightened out.

May 31, 1933

Chicopee Manufacturing Corp.,  
West Main Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on Hearthstone Quarry Brook, so called, in the City of Chicopee, has been inspected by our engineer and your attention is called to the following conditions noted by him;

"Although this dam was built only a few years ago, there is considerable erosion and disintegration showing on the downstream face of the concrete in the spillway section. This erosion has penetrated to a depth of three or four inches in places and if it is not checked will probably continue to such an extent that the stability of the structure will be affected. The dam is located so close to the Chicopee River that no damage would result from its failure, but it might be to the owner's interest to repair the structure and for this reason the above conditions are noted."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_

May 3, 1933

Chicopee Manufacturing Corp.,  
West Main Street,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 176 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your two dams, located on the Chicopee River in the City of Chicopee have been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

Lower Dam - "The stone masonry facing needs pointing in places and there is a leak through the structure at a point about one hundred and thirty feet from the east end which should be repaired. There are other leaks also which, although not so large, should receive attention."

Upper Dam - "The concrete section or southern part of this dam shows disintegration on the downstream face, especially at its joint or connection with the stone masonry part. This disintegration, is gradually lessening the stability of the structure and therefore should be checked."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

May 3, 1933

Quinnehtuk Co.,  
Turners Falls, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam, located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following condition noted and recommendation made by him;

"On the downstream side west of the overflow, a portion of the embankment has been washed out. This washout should be re-filled with suitable material if the pond is to be maintained."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendation be complied within a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman.

\_\_\_\_\_  
\_\_\_\_\_



May 10, 1933

The Chicopee Mfg. Corp.,  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam known as the St. James Springs dam located on a small tributary of the Chicopee River in the City of Chicopee, has been inspected by our engineer and your attention is called to the following condition noted and recommendation made by him;

"On the downstream side around the spillway a portion of the embankment has been washed out. This washout should be re-filled with suitable material and the dam put in proper repair if the pond is to be maintained.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman.

\_\_\_\_\_

\_\_\_\_\_

This letter written in  
Mr. Tighe's office.

September 30, 1935

Chicopee Manufacturing Corp.,  
West Main Street  
Chicopee, Mass.

Gentlemen:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your dam located on the Chicopee River in the City of Chicopee has been inspected by our engineer and your attention is called to the following condition noted and recommendations made by him;

Upper Dam - "At some points the ledge foundation on which the stone masonry is laid is disintegrating under the masonry. This disintegration appears to be greatest near the center of the structure where it extends at least a foot under the masonry. It is recommended that these spaces caused by disintegration, be filled with cement concrete.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours truly,

COUNTY COMMISSIONERS,

By.....Thos. J. Costello.....  
Chairman

Chas. W. Bray  
.....

Maurice G. Donahue  
.....

November 3, 1937

Chicopee Manufacturing Corporation  
Main Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your dam on Hearthstone Quarry Brook in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"While this dam is in good condition, there is some scouring and washing out of the earth fill under the lower end of the concrete spillway channel, to which the attention of the owner ought to be drawn."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
CHAIRMAN

August 7, 1940

Chicopee Mfg. Corporation  
Main Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby notified that your old drinking water supply dam on a tributary of Chicopee River in Chicopee has been inspected by our engineer, and your attention is called to the following conditions noted and recommendations made by him;

"Some repairs are needed on this dam, especially along the downstream ends of the masonry abutments, where the adjoining earth has been washed away."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_

November 6, 1940

Mr. Joseph Patinaude,  
Chicopee Manufacturing Corp.,  
Main Street,  
Chicopee Falls, Mass.

Dear Mr. Patinaude:

Enclosed find copy of a letter which  
has been sent to the County Commissioners and  
I believe this copy covers the matter in question.

Very truly yours,

CHAIRMAN, COUNTY COMMISSIONERS

CWB/N  
Encl.

MEMBER  
AM. SOC. C. E.  
INST. C. E. GREAT BRITAIN  
ENG. INST. OF CANADA

## JAMES L. TIGHE

CONSULTING ENGINEER  
CALEDONIAN BUILDING, 189 HIGH STREET  
HOLYOKE, MASS.

TELEPHONE 5525

MEMBER AM. INST. OF CONSULTING ENGINEERS, INC.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
ANALYSIS OF WATER

November 5, 1940

WATER POWER INVESTIGATIONS  
AND DEVELOPMENT  
DAMS AND POWER INSTALLATIONS  
ESTIMATES AND APPRAISALS

MEMBER  
BOSTON SOC. C. E.  
ENG. SOC. WEST. MASS.  
AM. & N. E. W. W. ASSOC'S

The Hon. The Board of County Commissioners  
Hampden County, Court House  
Springfield, Mass.

Charles W. Bray, Chairman:

Dear Sir:

In August of the present year the Chicopee Manufacturing Corporation was notified by the County concerning the need of repairs on its former drinking water supply dam located on a small tributary of the Connecticut River near St. James Avenue in Chicopee Falls.

I wish to report that, instead of repairing this dam and maintaining it any longer, the Corporation has taken down and removed the spillway section of the structure, thus making a free waterway for the brook, so that in the future no pondage will be formed at this place.

Respectfully submitted,

*James L. Tighe*

October 3, 1945

Chicopee Mfg. Corp.  
Main Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam on Hearthatone Quarry Brook has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"In regard to this structure the bottom of the reinforced concrete overflow channel, which is carried on iron pipe supports, has become disrupted, thus causing leakage and the washing away of the earthfill under the channel."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_

JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

August 12, 1949

The Hon. The Board of County Comm'rs      Re: Complaint of:  
Hampden County Court House                      Mr. Max Zielinski  
Springfield, Mass.                                  Lombard Road, Chicopee  
Thomas F. Sullivan, Chairman

Gentlemen:

Mr. Zielinski owns land bordering Fuller Brook, off Lombard Street in Chicopee.

Fuller Brook drains a large portion of the Town of Ludlow, as well as the southeast corner of Chicopee, and discharges into the Chicopee River at Bircham Bend. About one thousand feet upstream from its mouth, Fuller Brook flows through a concrete culvert, located under a sixty foot high fill of the Old Hampden Railroad. The culvert is ten feet in diameter, and the drainage area of the Brook above it is about ten square miles.

The records in the assessor's office of the City Hall in Chicopee, show the present owner of the railroad embankment and culvert to be the Quinnehtuck Company of Turners Falls, Massachusetts. Mr. Zielinski's land is located about a few hundred feet upstream from the culvert. A dam of earth and boulders has been built to a height of five feet, just inside the upstream end of the culvert. This dam has apparently been built by swimmers to form a pool. The dam backs up water to a height of four feet, while the flow of the Brook passes through the dam by percolating through the voids of the stone. The raised elevation of the Brook causes water to back up into small drainage ditches, dug by Mr. Zielinski, to drain meadow land adjacent to the Brook. The dam reduces the cross-sectional area of the culvert by about fifty per cent.

If the dam remains, there is a potential danger of blocking of the culvert, and the flooding of private property and public roads. Due to the large drainage area of the Brook, and since the dam does not meet safety requirements, it should be removed.

Very truly yours,

  
County Hydraulic Engineer





August 17, 1949

The Quinnehtuck Company,  
Turners Falls,  
Massachusetts.

Dear Sirs:

We are enclosing herewith copy of letter dated August 12, 1949 from the Hampden County Hydraulic Engineer in regard to the complaint of Mr. Max Zielinski, Lombard Road, Chicopee, who owns land bordering Fuller Brook.

We order the existing dam on your property to be removed immediately because of the large drainage area involved. This dam comes under the jurisdiction of the Hampden County Commissioners.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Acting Chairman

WFS/N  
Encl.

*Fuller Brook Dam*  
*Chicopee*  
Copy of this letter mailed to  
Philip E. Bond, County Hydraulic Engineer,  
Holyoke, Mass.

October 18, 1950

Quinnehtuk Company  
Turners Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, known as Dwight Dam and located on the Chicopee River in Chicopee, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"There is some leakage through the stonework at the center of the face of the canal spillway about 6 feet down from the spillway crest. This condition is not serious but should be called to the owner's attention."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

*Dwight Dam  
Chicopee River*

# THE QUINNEHTUK COMPANY

CONSTITUENT OF WESTERN MASSACHUSETTS COMPANIES

ADDRESS REPLY TO:

65 State Street  
Springfield 2, Mass.

August 31, 1949

County Commissioners  
County of Hampden  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

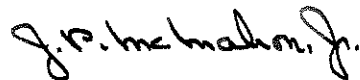
This will acknowledge your letter of August 17, 1949 in reference to the removal of the dam that had been built by unknown persons across the face of a culvert that runs beneath the old Hampden Railroad right-of-way in the town of Ludlow.

Please be advised that the remains of the obstruction have now been removed both at the face of the culvert and a short distance inside of said culvert.

Mr. Zielinski should experience no drainage difficulties from this source now.

Very truly yours,

THE QUINNEHTUK COMPANY



J. P. McMahon, Jr.  
Real Estate & Right of Way Agent

JPM:1q

# THE QUINNEHTUK COMPANY

CONSTITUENT OF WESTERN MASSACHUSETTS COMPANIES

ADDRESS REPLY TO:

Turners Falls, Mass.  
October 26, 1950

County of Hampden  
Office of the County Commissioners  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

Thank you very much for your letter dated October 18, 1950 concerning our dam located in Chicopee. We have brought this matter to the attention of the Engineering and Operating Departments of Western Massachusetts Electric Company, which concern leases this property.

Very truly yours,

THE QUINNEHTUK COMPANY

  
C. E. Bankwitz  
Assistant Treasurer

CEB:VN

Copy of this letter mailed to G.H. McDonnell, County Hydraulic Engineer, on October 27, 1950.

*Devergh Bank  
Chicopee River*

Red Barn Dams fka Sullivan Dams



1950 Chicopee

Located on Montgomery Street in Chicopee Falls - both dams breached 1951.

City/Town	Chicopee Falls
City/Town	Chicopee
Dam	Sullivan Dams
Dam	Red Barn Dams
Name	Red Barn Restaurant
Name	Ashe, John H
Name	Spano,Anthony
Name	Sullivan, John L
Streets	Montgomery Street

JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

April 10, 1951

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Attention: William Stapleton, Chairman

Gentlemen:

Re: Red Barn Dam  
Chicopee, Mass.

At the rear of the Red Barn Restaurant, located on Montgomery Street in Chicopee, there have been two small dams formerly owned by John L. Sullivan and now owned by Anthony Spano of 98 Newbury Street. The larger of the two dams was at one time owned by Mrs. John H. Ashe. This dam as it existed at the time of the last inspection consisted of a concrete wall 24 to 30 inches thick and 14 feet high from the brook bed to its top. Behind the concrete wall a sand and earthfill 35 feet in width at the top formed the main portion of the dam. The upstream face of the dam was a natural slope of about 3 on 1. The pond formed by the dam contained somewhat less than a million gallons of water and the drainage area was approximately 1/4 of a square mile. In the center of the earthfill portion of the dam there was located a wooden core wall. The remains of the core wall are apparent at the present time. Immediately upstream from this main dam there was a smaller dam about 8 feet in width on top and 6 feet in height. This was an earth dam and it impounded less than 1/2 million gallons of water. The length of the small dam was approximately 74 feet, while the length of the main section of the larger dam was approximately 50 feet. The spillway of each dam was a pipeline laid through the dam. In the case of the lower dam the pipeline was of steel construction, while at the smaller and upper dam there was a combination concrete and steel pipe. These dams were last inspected in September of 1950, and a report submitted to your Board on October 16, 1950. The report reads as follows:

"The Sullivan dams are located easterly of the Red Barn Restaurant on Montgomery Street in Chicopee Falls. One dam is located directly above the other and both have a drainage area of approximately 1/4 square mile. The lower dam has a spillway pipe fourteen inches in diameter and a 2-foot freeboard. The capacity of the spillway is inadequate for the drainage area, and should be increased. Water from the spillway pipe discharges on brick and debris at the base of the dam, and care should be taken to see that this area is not washed out by the spillway discharge.

JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

- 2 -

The Hon. The Board of County Commissioners  
Springfield, Mass.

4/10/51

The upper dam is located directly above the lower dam and has an 18-inch concrete pipe spillway through the dam. The capacity of this spillway pipe is inadequate and should be increased. A screen over the inlet end of the pipe restricts the flow through the pipe and should be removed. There is evidence of fill being washed from the dam on the outside of the spillway pipe on the downstream side of the dam. This condition should be investigated and any leakage stopped."

The lower dam as it existed prior to its destruction had evidently been improved and enlarged since it was owned by Mrs. Ashe. These dams had been inspected in August of 1949 by the undersigned who was then assisting Mr. Bond the County Engineer. This inspection was made following an extremely heavy, intermittent but local rain-storm which occurred on August 12 and 13, 1949. During the period of the storm, 2.40 inches of rain fell on the general area. The inspection of the lower and larger dam at that time showed that it had withstood the heavy runoff and that the spillway had adequately handled the storm flow.

The smaller dam was inspected also and found to be satisfactory. This dam does not come under County jurisdiction.

On the basis of this past experience in 1949, the small size of the drainage area involved and the flat, sandy topography of the drainage area, it was felt by the undersigned, following his inspection in 1950, that though a condition existed wherein the spillway of the lower or main dam required enlarging and certain repairs were advisable at the small and upper dam, the conditions did not warrant drastic action for immediate enforcement of the recommendations.

On March 30 and 31, 1951, a rainfall was recorded at 2.20 inches on the local area. This storm began at about 10 a.m. on March 30 and ended about 3 a.m. on March 31. This is the approximate hour when the dam or dams failed, in accordance with reports given the undersigned. An investigation at the site was conducted during the forenoon of March 31, 1951. It was found that the easterly end of the main or lower dam had been washed out and that the easterly half of the concrete wall forming the downstream face of the dam had collapsed and was lying in the stream bed.

JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

- 3 -

The Hon. The Board of County Commissioners  
Springfield, Mass.

4/10/51

Levels were taken at the dam and it was noted that two separate water lines had been made on the sandy basin where the pond had been formed. The lower water line was a more definite line and was found to be at an elevation of about  $2\frac{3}{4}$  inches higher than the concrete portion of the main dam. The earthfill portion of the main dam was approximately 35 feet in width and at a height of approximately one foot above the concrete wall. Thus, though the water in the pond had stood for some time at  $2\frac{3}{4}$  inches above the elevation of the top of the concrete wall, the earthfill undoubtedly held the water back.

The second or higher water line around the basin was found to be about 10 inches above the lower water line and thus nearly 13 inches above the level of the top of the concrete. This higher water line was found to be a very fine but rather definite line and it seemed to indicate that the water level in the pond was raised to this elevation for a very short period of time. It was undoubtedly during this period that the water washed over and around the easterly or collapsed end of the dam. There is no evidence on the remaining portion of the earthfill of any water washing over the top of the structure. The concrete wall evidently did not extend very far into the easterly bank of the valley, and it was probably at this very easterly end that the water washed down to and around the concrete causing the eventual collapse of the easterly portion of the structure.

An examination of the upstream pond showed that this small dam had failed at the section through which the spillway pipe had been laid. The central and buried portion of the spillway pipe was steel and large holes had been cut through its side. Water passing through the pipe together with seepage through the dam, undoubtedly caused a washout of the dam fill along this pipe and the eventual failure of this dam. This small and upper dam, so called, did not come under County jurisdiction, and it is the belief of the undersigned that the purpose of this dam and pond was simply to form a mud catcher and prevent floating leaves, debris, etc. from entering the lower pond which had served as a swimming pool. An examination of the sides of the pond showed that the water had, at one time, apparently risen above the normal pond level, and as in the case of the lower pond, the higher water line was fine but very much more indefinite. It was first believed that this pond had probably failed immediately prior to the failure of the main dam, at a time when the main pond was brimming full, and that the water released from the upper pond was contributing factor to the failure of the lower dam. A review



JAMES L. TIGHE  
PHILIP E. BOND  
  
TELEPHONE  
HOLYOKE 5525

**TIGHE & BOND**  
**CONSULTING ENGINEERS**  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
WATER POWER  
DAMS

- 4 -

The Hon. The Board of County Commissioners  
Springfield, Mass.

4/10/51


of the water levels and a comparison of the volumes of the ponds seem to void this theory in part. However, the high water line of the upper pond, as was pointed out, was not too definite and it is possible that an even higher water level existed than was indicated on the ground.

Recently the undersigned was informed that the upper pond had been washed out some time previously to March 30, however, this was heresay evidence and may not be a fact. In any event the two water lines on the shores of the main pond appear to definitely indicate a sudden short-lived increase in the pond level. Whether or not this increase was caused by water discharged suddenly from the upper pond, or from some other still unknown source on the drainage area, has not been definitely determined. Though the upper dam may have failed previously to the rain storm, it is possible that the failure was only of a partial nature and that complete failure may have occurred during the recent rain storm.

The undersigned plans to continue gathering any information on the drainage area which may have a bearing on the dam failure. Photographs have been taken of the pond area and the failed structures to record the conditions as they existed on the morning of March 31, 1951.

Respectfully submitted,

By

  
\_\_\_\_\_  
G. H. McDonnell  
County Hydraulic Engineer

October 18, 1950

Mr. John L. Sullivan  
c/o Red Barn Restaurant  
476 Montgomery Street  
Chicopee Falls, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your two dams, located easterly and in the rear of your restaurant at the above address, have been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"The lower dam has a spillway pipe fourteen inches in diameter and a 2-foot freeboard. The capacity of the spillway is inadequate for the drainage area, and should be increased. Water from the spillway pipe discharges on brick and debris at the base of the dam, and care should be taken to see that this area is not washed out by the spillway discharge. The upper dam is located directly above the lower dam and has an 18-inch concrete pipe spillway through the dam. The capacity of this spillway pipe is inadequate and should be increased. A screen over the inlet end of the pipe restricts the flow through the pipe, and should be removed. There is evidence of fill being washed from the dam on the outside of the spillway pipe on the downstream side of the dam. This condition should be investigated and any leakage stopped."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_

Chairman

## Red Barn Dam

4—Holyoke (Mass.) Transcript-Telegram, Saturday, March 31, 1951

### Heavy Rain Floods Cellars And Streets Causing Property Damage

Two dams at the swimming pool behind the Red Barn at 476 Montgomery St., broke at 3:30 a. m. today, flooding the Sheridan St. and Taylor St. section of Chicopee Falls, costing the Highway Dept. \$800 in labor and repairs and causing inestimable damage to property of nearby residents, whose cellars were flooded, to the Sheridan St. school grounds and industrial establishments nearby.

The flood of water which rushed across Sheridan St., was too much for the city sewer to handle and went on to flood four cellars of homes on Taylor St., and flowed as far as the North-South highway.

Thomas Laramée, highway superintendent, said the department pumped water from four cellars. One house had its foundation undermined and two feet of water was found in the first floor kitchen, he said. Sheridan and Taylor Sts. had as much as

four feet of water inundating them, but the water was gradually receding at last reports.

A bridge and culvert at the Bay State Refining Co., 8 Montgomery St., were washed out.

Eugene P. O'Neill, president of the Hampden Bleachery in Chicopee Falls, said his property was damaged but said "a catastrophe" would have resulted if the dam which he broke down last spring had been still standing. He said he had five million gallons of water in his pond before breaking the dam. As it was, the rush of water from the Red Barn break flooded his brook and diverted water under his buildings, causing him to put a compressor and bulldozer to work to pump water.

O'Neill added that it was fortunate the break did not occur in the daytime as the lives of children at the St. Patrick's and Sheridan school might have been endangered.

TIGHE & BOND

c o p y

189 High Street,  
Holyoke, Mass.

April 10, 1951

The Hon. Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Attention: William Stapleton, Chairman

Re: Red Barn Dam  
Chicopee, Mass.

Gentlemen:-

At the rear of the Red Barn Restaurant, located on Montgomery Street in Chicopee, there have been two small dams formerly owned by John L. Sullivan and now owned by Anthony Spano of 98 Newbury Street. The larger of the two dams was at one time owned by Mrs. John H. Ashe. This dam as it existed at the time of last inspection consisted of a concrete wall 24 to 30 inches thick and 14 feet high from the brook bed to its top. Behind the concrete wall a sand and earthfill 35 feet in width at the top formed the main portion of the dam. The upstream face of the dam was a natural slope of about 3 on 1. The pond formed by the dam contained somewhat less than a million gallons of water and the drainage area was approximately  $1/4$  of a square mile. In the center of the earthfill portion of the dam there was located a wooded core wall. The remains of the core wall are apparent at the present time. Immediately upstream from this main dam there was a smaller dam about 8 feet in width on top and 6 feet in height. This was an earth dam and it impounded less than  $1/2$  million gallons of water. The length of the small dam was approximately 74 feet, while the length of the main section of the larger dam was approximately 50 feet. The spillway of each dam was a pipeline laid through the dam. In the case of the lower dam the pipeline was of steel construction, while at the smaller and upper dam there was a combination concrete and steel pipe. These dams were last inspected in September of 1950, and a report submitted to your Board on October 16, 1950. The report reads as follows:

"The Sullivan dams are located easterly of the Red Barn Restaurant on Montgomery Street in Chicopee Falls. One dam is located directly above the other and both have a drainage area of approximately  $1/4$  square mile. The lower dam has a spillway pipe fourteen inches in diameter and a 2-foot freeboard. The capacity of the spillway is inadequate for the drainage area, and ~~xxxx~~ should be increased. Water from the spillway pipe discharges on brick and debris at the base of the dam, and care should be taken to see that this area is not washed out by the spillway discharge. The upper dam is located directly above the lower dam and has an 18-inch concrete pipe spillway through the dam. The capacity of this spillway pipe is inadequate and should be increased. A screen over the inlet end of the pipe restricts the flow through the pipe and should be removed. There is evidence of fill being washed from the

dam on the outside of the spillway pipe on the downstream side of the dam. This condition should be investigated and any leakage stopped."

The lower dam as it existed prior to its destruction had evidently been improved and enlarged since it was owned by Mrs. Ashe. These dams had been inspected in August of 1949 by the undersigned who was then assisting Mr. Bond the County Engineer. This inspection was made following an extremely heavy, intermittent but local rainstorm which occurred on August 12 and 13, 1949. During the period of the storm, 2.40 inches of rain fell on the general area. The inspection of the lower and larger dam at that time showed that it had withstood the heavy runoff and that the spillway had adequately handled the storm flow.

The smaller dam was inspected also and found to be satisfactory. This dam does not come under County jurisdiction.

On the basis of this past experience in 1949, the small size of the drainage area involved and the flat, snady topography of the drainage area, it was felt by the undersigned, following his inspection in 1950, that though a condition existed wherein the spillway of the lower or main dam required enlarging and certain repairs were advisable at the small and upper dam, the conditions did not warrant drastic action for immediate enforcement of the recommendations.

On March 30 and 31, 1951, a rainfall was recorded at 2.20 inches on the local area. This storm began at about 10 a.m. on March 30 and ended about 3 a.m. on March 31. This is the approximate hour when the dam or dams failed, in accordance with reports given the undersigned. An investigation at the site was conducted during the forenoon of March 31, 1951. It was found that the easterly end of the main or lower dam had been washed out and that the easterly half of the concrete wall forming the downstream face of the dam had collapsed and was lying in the stream bed.

Levels were taken at the dam and it was noted that two separate water lines had been made on the sandy basin where the pond had been formed. The lower water line was a more definite line and was found to be at an elevation of about 2 3/4 inches higher than the concrete portion of the main dam. The earthfill portion of the main dam was approximately 35 feet in width and at a height of approximately one foot above the concrete wall. Thus, though the water in the pond had stood for some time at 2 3/4 inches above the elevation of the top of the concrete wall, the earthfill undoubtedly held the water back.

The second or higher water line around the basin was found to be about 10 inches above the lower water line and thus nearly 13 inches above the level of the top of the concrete. This higher water line was found to be a very fine but rather definite line and it seemed to indicate that the water level in the pond was raised to this elevation for a very short period of time. It was undoubtedly during this period that the water washed over and around the easterly or collapsed end of the dam. There is no evidence on the remaining portion of the earthfill of any water washing over the top of the structure. The concrete wall evidently did not extend very far into the easterly bank of the valley, and it was probably at this very easterly end that the water washed down to and around the concrete causing the eventual collapse of the easterly portion of the structure.

An examination of the upstream pron showed that this small dam had failed at the section through which the spillway pipe had been laid. The central and buried portion of the spillway pipe was steel and large holes had been cut through its side. Water passing through the pipe together with seepage through the dam, undoubtedly caused a washout of the dam fill along this pipe and the eventual failure of this dam. This small and upper dam, so called, did not come under County jurisdiction, and it is the belief of the undersigned that the purpose of this dam and pond was simply to form a mud catcher and prevent floating leaves, debris, etc. from entering the lower pond which had served as a swimming pool. An examination of the sides of the pond showed that the water had, at one time, apparently risen above the normal pond level, and as in the case of the lower pond, the higher waterline was fine but very much more indefinite. It was first believed that this pond had probably failed immediately prior to the failure of the main dam, at a time when the main pond was brimming full, and that the water released from the upper pond was contributing factor to the failure of the lower dam. A review of the water levels and a comparison of the volumes of the ponds seem to voit this theory in part. However, the high water line of the upper pond, as was pointed out, was not too definite and it is possible that an even higher water level existed than was indicated on the ground.

Recently the undersigned was informed that the upper pond had been washed out some time previously to March 30, however, this was heresay evidence and may not be a fact. In any event the two water lines on the shores of the main pond appear to definitely indicate a sudden short-lived increase in the pond level. Whether or not this increase was caused by water discharged suddenly from the upper pond, or from some other still unknown source on the drainage area, has not been definitely determined. Through the upper dam may have failed previously to the rain storm, it is possible that the failure was only of a partial nature and that complete failure may have occurred during the recent rain storm.

The undersigned plans to continue gathering any information on the drainage area which may have a bearing on the dam failure. Photographs have been taken of the pond area and the failed structures to record the conditions as they existed on the morning of March 31, 1951.

Respectfully submitted

G. H. McDonnell

# Hamilton Propeller to Build Bradley Field Plant

## The Weather

CLEAR, COOL TONIGHT;  
WARM TOMORROW

## Springfield Daily News

5 O'CLOCK  
Final Stock  
QUOTATIONS

71st Year, No. 31

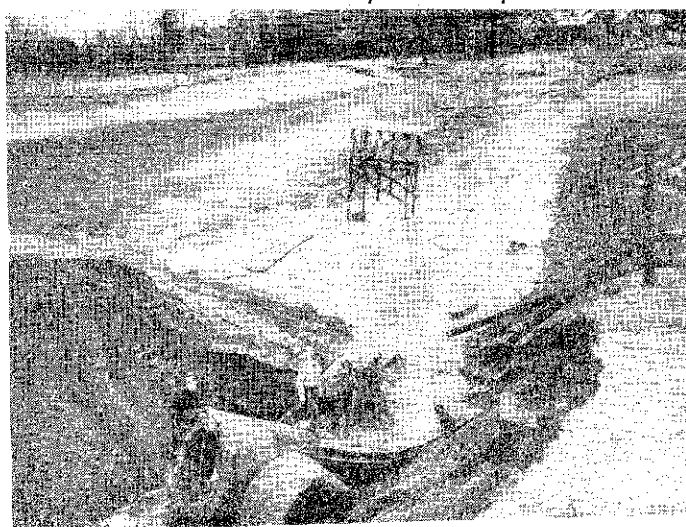
ESTABLISHED IN 1880  
BY CHARLES J. WILKINS

SPRINGFIELD, MASS., SATURDAY, EVENING, MARCH 31, 1951

THREE CENTS—SIXTEEN PAGES

# DAM BREAK FLOODS CHICOPEE

Where Dam Break Emptied Chicopee Pond



Chicopee, March 31.—Sudden failure of a dam at this point early today freed the pent up waters of the Red Barn Pond, unleashing a flood which for a time menaced a section of Chicopee Falls. An empty pond downstream caught and contained a large share of the water, but much of it swept into a residential area causing damage. Many people slept right through the commotion that followed.

## Red Barn Swimming Pool Bursts Two Dams After Night of Heavy Rain

Pond Below, Half Empty,  
Holds Most of Wild Water,  
Prevents Catastrophe; Two  
Streets Flooded, Homes Get  
Basement Pools

Chicopee, March 31.—Hundreds of people slept unaware that catastrophe was fleetingly knocking on their doors early today when two dams burst at Oak Plains Pond, of the Red Barn, discharging a wall of water that swept down a gully and swept into a residential area.

Only the fact that the Hamilton Propeller Pond, a short distance downstream, had been lowered, checked the main force of the torrent from cascading into a populated area to cause heavy property damage and possible loss of life.

The almost empty reservoir pond caught and stemmed the major volume of the flood. Luckily the steady secondary dam was able to stand up under the pressure.

### Streets Flooded

As it was an evening walk of water swept through the Sheridan and Taylor St. areas flooding some houses, damaging chimneys and pulling up trees and debris in its wake. A bridge and other rear a family were undisturbed and washed out as the water poured out to the Chicopee River.

The main dam burst at 2:30 a. m. before the water had subsided as far as the barrier at the entrance to the pond, which serves as a summer bathing center near the Red Barn swimming area.

At that hour, Chicopee Falls slumbered peacefully, down through forest, created an audible roar when it was suddenly released, hardly anybody heard it as it swept down a gully and fanned out into Sheridan and Taylor Sts.

### Police on Job

Police were first on the job. The flood alert had passed, but plenty of water and debris were in evidence. An emergency call was put in for Highway Department and men crews were sent out at an early hour to clean up the debris and rubble. Workers found that the flood had swept through the Sheridan School yard, but apparently caused no damage of any account there.

A number of cellars were flooded, and several had to be pumped out this morning. In one cellar the water was three feet deep.

Highway officials reported that the flood damage bill, as far as the city was concerned, amounted to \$300.

### Heavy Rainfall

The dam was built by a former owner of the Red Barn two years ago under a state permit, according to official specifications, to create the swimming pool. A total rainfall of nearly two inches concentrated in a period of 24 hours caused the flood, which feeds the pond, to rise to flash flood proportions, however, forcing the dams to give way.

Many residents in the threatened area slept right through the flood and incidental commotion and did not know they had passed through a potential disaster until their alarm clocks rang this morning.

Today's dam failure was reminiscent of a Williamsburg flood in 1934. In that year the pent up waters of a pond were released by a dam that Edward Williams was engaged by a wall of water that flooded the entire village. A police officer on the beat reached for a telephone on a pole when he heard the torrent coming. He never completed the call. He had to climb the pole to escape being swept away.

Roberts Pond Dam aka Epstein Dam



1952 Chicopee

Located in Willimansett on Roberts Pond.

City/Town	Chicopee
Dam	Epstein Dam
Dam	Roberts Pond Dam
Name	Mountain Lake Inc.
Name	Nowak, Chester A
Name	Epstein, Thomas
Water	Roberts Pond



August 12, 1952

Mr. Thomas Epstein  
25 Lexington Avenue  
Holyoke, Mass.

Dear Sir:

At a recent inspection of your dam at Roberts Pond in Chicopee by the County Hydraulic Engineer, the following has been observed and reported by him:

"The spillway and discharge structure have suffered severe damage during the recent heavy rains. In his opinion the present condition of the spillway is dangerous. Further overflow of the pond through this spillway would result in further damage to the spillway and could lead to the complete failure of the dam. The pond should be drawn down using the 48 inch pipe and the gate on this pipe should be left in the full open position until permanent repairs to the spillway have been completed. Plans and specifications for the repairs should be filed with this office before any work is undertaken."

The Board directs you to draw down Roberts Pond and leave the 48 inch gate full open until such time as the permanent repairs have been completed and approved by this office.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

*Epstein Dam  
Roberts Pond in Chicopee*

August 12, 1952

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Attn: William F. Stapleton, Chairman

Gentlemen:

On Monday, August 11, the undersigned inspected the Enstein Dam at Roberts Pond in Chicopee. The spillway and discharge structure have suffered severe damage during the recent heavy rains. In my opinion the present condition of the spillway is dangerous. Further overflow of the pond through this spillway would result in further damage to the spillway and could lead to the complete failure of the dam. The pond should be drawn down using the 48 inch pipe and the gate on this pipe should be left in the full open position until permanent repairs to the spillway have been completed. Plans and specifications for the repairs should be filed for your approval.

Respectfully yours,

---

George H. McDonnell  
County Hydraulic Engineer

C O P Y

TIGHE & BOND

Consulting Engineers

189 High Street,  
Holyoke, Mass.

December 30, 1952

The Hon. Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:

The work of repairing and rebuilding the spillway at the Roberts Pond Dam in the Fairview section of Chicopee has been completed. The work was inspected from time to time during construction and a high quality of workmanship was always observed.

Two minor changes in the plans were authorized during construction by the undersigned. The first change allowed the use of a shallower footing wall because to hold to the original plans would have placed the footing into a wet and less desirable foundation material. This condition was not discovered until the excavation for foundations was being carried on. The other change allowed the use of gravel instead of cement grout in the voids of the stone paving downstream from the concrete spillway. Neither of these changes were of a major nature requiring the submission of a new design.

The final inspection of the structure has been made and the reconstructed spillway has been completed in accordance with plan and specifications on file in your office with the exception of the two minor changes hereinabove mentioned. Since the work was carried on and completed in the fall of the year, side slopes cut back into the natural earth from the spillway channel have no cover of vegetation and will be subject to wash and erosion during the winter and spring. Damage done in this manner will naturally require repairing and certain control work by the owner in the spring and summer of 1953.

Since the construction work on the spillway structure itself has been satisfactorily completed, the work is recommended to your Honorable Board for acceptance.

*Roberts Pond Dam  
Chicopee*

Respectfully submitted,

George H. McDonnell, County Hydraulic  
Engineer

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

TIGHE & BOND  
CONSULTING ENGINEERS  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS  
TEL. 5525

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

March 10, 1953

The Hon. The Board of County Commissions  
Hampden County Court House  
Springfield, Mass.

Re: Mt. View Lake Development Dam  
Fairview, Chicopee, Mass.

Gentlemen:

In regard to our conversation of Wednesday, March 4, 1953 with representatives of the Hampden Brewing Company, on the above subject dam and pond, I report as follows:

Mr. Thomas Epstein, owner of the dam and pond in question is out of town at the present time, however I contacted his nephew, Mr. William Epstein by phone and discussed the problem of silt and sand washing into the pond of the Hampden Brewing Co. I explained to Mr. William Epstein that because of weather conditions and the fact that the pond was drawn down, apparently contributed and aggravated the sanding condition in the stream below the dam. I pointed out to Mr. Epstein that if the valve in his dam were closed, and it can be closed because the repair work at the spillway has been completed, except for minor seeding and grading, water would be ponded and erosion now taking place in the stream bed within the dry pond would stop.

Mr. Epstein agreed to cooperate, but stated that he was waiting to do certain repair work to the valve prior to closing it, and that this repair work was being hampered by the fact that he was not able to get repair parts for the valve since he did not know the make and number of the valve. I explained to Mr. Epstein how he could probably determine the make and number, and he agreed to follow the suggestion and expedite the repair work. On completion of the repair work he will close the valve and will allow a certain quantity of flow down stream of the dam during the period that the pond is filling.

Respectfully submitted,

  
G.H. McDonnell  
County Hydraulic Engineer

ghm/al

Copy of this letter sent to Mr. Frank McKenna on March 17, 1953.

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING

TIGHE & BOND  
CONSULTING ENGINEERS  
GEORGE H. McDONNELL, PROP.  
189 HIGH STREET  
HOLYOKE, MASSACHUSETTS

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

March 16, 1953

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:

I have made an inspection this date of the stream between the Hampden Brewery in Willimansett and Mr. Epstein's dam at Roberts Pond in Fairview, presently known as the Mt. View Lake Development.

At the point where the brook enters the Brewing Company's property the brook was running quite muddy and appeared to be carrying a fairly large quantity of fine sand, silt and clay particles. The inspection of the brook was made today particularly to observe conditions following the extremely heavy rain storm of Friday March 13th and Sunday March 15th.

Following the brook upstream, it was noted that the stream apparently, during the height of the run-off, overflowed it's banks and did some washing of soil areas. In one instance a small tributary to the main brook appeared to have eaten into adjacent banks and washed soils to the main stream.

At the site of the dam at Mt. View Lake Development the gate was still opened and no water was being stored. The water running through the draw-off was quite clear and it was only after the water passed below the dam that the stream began to pick up and convey quantities of soil particles.

The recent construction on the spillway is located on the left bank of the stream and is situated in such a manner that the toe of the cut and fill slopes become the left bank of the brook formed by the water after it passes through the draw-off pipeline.

As the water of the brook flows by the new construction area some of the very fine particles of the left bank of the stream are washed along. In it's course, additional silt, clay and sand is picked up by the flowing waters so that by the time the stream reaches the Brewing Company pond, a considerable quantity of solid matter is being carried with the water.

The Hon. Board of County Commissioners

March 17, 1953

An examination of the construction area where the spillway was rebuilt shows some washing of the newly exposed soil. The Concrete spillway has been partly covered with this washed soil and the channel down stream of the spillway toe is partly blocked with sand and clay.

When the owner begins to store water in his pond, the condition of the stream will improve somewhat, but this improvement will probably not be because the ponding of water has stopped erosion within the pond. After the pond is filled and water once again passes over the spillway, an erosion problem will occur because of the water washing the sand and clay, now partly plugging and blocking the spillway channel. In my opinion this is not a problem of safety but more a problem of water quality.

With the coming of the Spring season it would advisable to urge the owner to properly loam and plant the raw scarred soil areas and to provide the drainage necessary to handle surface run-off waters. Until such time as the brook is cleaned below the dam, either by man or nature, and until a proper growth of vegetation can be provided in the vicinity of the new construction, I believe the brook will continue to convey sand, silt and clay particles as it flows down stream towards the Connecticut River.

This report is submitted to you to provide up to date information on the condition of the brook and for record and file purposes.

Very truly yours,

TIGHE & BOND



G.H. McDonnell

County Hydraulic Engineer

ghma/l

December 16, 1953

Mr. Thomas Epstein  
362 High Street  
Holyoke, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located at Roberts Pond in the Fairview section of Chicopee has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Debris in the spillway channel just below the crest of the structure should be removed. At the present time this debris consists of large boards and logs and if allowed to remain in the channel they may eventually cause a partial blockage of the flow and if the force of water moves them into the narrow section of the channel it is possible that damage could be done to the earth side slopes of the spillway area by splashing of the falling water and by diversion of streams of water."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_

ADELSON & EPSTEIN, INC.  
ADEP REALTY CORPORATION  
BEVERLY REALTY CORPORATION OF HOLYOKE  
EPSTEIN BROS.  
ESTATE OF ISRAEL EPSTEIN  
EPSTEIN FURNITURE CO., INC.  
HEIRS OF SAMUEL EPSTEIN  
HOLYOKE AUCTION CO., INC.  
HOLYOKE REALTY CORPORATION  
MT. VIEW LAKE DEVELOPMENT, INC.  
OAK REALTY CORP.

OFFICE OF  
**THOMAS EPSTEIN**  
362 ~~524~~ HIGH STREET  
HOLYOKE, MASSACHUSETTS

December 29, 1953

Hampden County Commissioners  
37 Elm Street  
Springfield, Mass.

Gentlemen:

Re your letter of December 16, 1953 pertaining to debris in the channel,  
please be advised that this matter has already been taken care of.  
We want to thank you for calling this matter to our attention.

Yours very truly,

MT. VIEW LAKE DEVELOPMENT, INC.

  
Thos. Epstein, Treasurer

TE:dh



WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING  
ELECTRICAL ENGINEERING

**TIGHE & BOND, INC.**  
**CONSULTING ENGINEERS**  
BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

CD Chicopee


Sept. 18, 1956

The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Massachusetts

Gentlemen:

I have recently inspected the dam at Roberts Pond in the Fairview section of Chicopee and find that the pond has not as yet been drawn down for the winter and that the grouted riprap at the end of the spillway chute has been undermined and has broken up and settled. It is recommended that the owner of Roberts Pond Dam be urged to draw down the level of the Pond if the Pond is not to be used until the 1957 swimming season and that additional riprap be placed at the downstream end of the spillway chute to compensate for the settlement that has occurred.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mdb

Sept. 19, 1956

Mr. Thomas Epstein  
362 High Street  
Holyoke, Mass.

Dear Sir:

In a recent inspection of your dam at Roberts Pond in Fairview, our County Engineer reports that the pond has not as yet been drawn down for the Fall and Winter season and that grouted riprap at the downstream end of the spillway chute has settled sufficiently to cause breaking of the grout and a lowering of the elevation of the channel below the spillway chute.

If the pond will not be used for recreational purposes until the Summer season of 1957, will you kindly open the draw-off gate and lower the surface of Roberts Pond. It is our understanding that you ordinarily lower the level of the pond yearly. Such a lowering will increase the safety factor at the dam should extremely heavy Fall rains or Spring run-off occur.

During the winter season it would be advisable to place additional riprap in the channel downstream of the spillway chute. This riprap should be relatively large in size in order to be stable at times of high flow velocities.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

William F. Stapleton

Thomas F. Sullivan

Acting

Commissioner Francis M. O'Keefe

**THOMAS EPSTEIN**  
**REAL ESTATE — INSURANCE**  
**AUCTIONEER — APPRAISER**  
**362 HIGH STREET • HOLYOKE, MASS.**

September 20, 1956

County Commissioners  
County of Hampden  
37 Elm Street  
Springfield, Mass.

Gentlemen:

Your letter of September 19, relative to Roberts Pond Dam, in Fairview, has been received today. Roberts Pond was formerly owned by Mt. View Lake Development, Inc., of which I was the treasurer. But about six months ago, we sold this pond, together with all surrounding land, to Key-Vee Realty Company, Inc. of 1160 Bay Street, Springfield, Mass.. As a matter of fact, our corporation has been dissolved, and I would suggest that you contact the new owners.

I have personally called the office of Thigh & Bond, and gave this same information to, I believe, Mr. McDonald's secretary.

Very truly yours,



Thomas Epstein

TE/tf

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING  
ELECTRICAL ENGINEERING

TIGHE & BOND, Inc.  
CONSULTING ENGINEERS  
BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

C.D. Chicopee  
Sept. 24, 1956

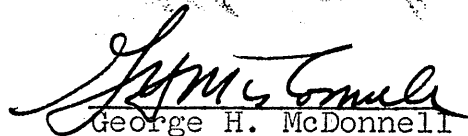
The Hon. The Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:

Regarding my recent report on Roberts Pond Dam dated Sept. 18, 1956, I have been informed by Mr. Thomas Epstein that Roberts Pond Dam is no longer owned by him, but is now the property of K-V Realty Corporation. Consequently, a communication should be sent to the K-V Realty Corporation relative to Roberts Pond Dam and spillway.

It is recommended that the officials of the K-V Realty Corporation be notified of the usual procedure of drawing down the pond in the fall and winter months and also of the need of repairing the spillway channel downstream of the spillway chute.

Very truly yours,



George H. McDonnell  
County Hydraulic Engineer

GHM/f

Sept. 26, 1956

K-V Realty Corporation  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

It is our understanding that you have purchased Roberts Pond Dam at Mountainview Lake in the Fairview section of Chicopee. The dam at this Lake comes under Chapter 253 of the General Laws of the Commonwealth and, consequently, inspections of this dam and reports thereon are made from time to time in accordance with the Law.

In a recent inspection of this dam our County Engineer reports that the pond has not as yet been drawn down for the fall and winter season and that grouted riprap in the downstream end of the spillway chute has settled sufficiently to cause breaking of the grout and a lowering of the elevation of the channel below the spillway chute.

If the pond will not be used for any specific purpose until the summer season of 1957, will you kindly lower the level of the water in the pond by opening the drawoff gate. The drawoff gate should only be opened a few turns in order that the discharge into the brook downstream of the dam will be properly controlled to prevent damage and thus objections from persons downstream. A lowering of the water level at this dam from early fall through the spring heavy runoff season greatly increases the safety factor of this structure.

During the winter season it would be advisable to place additional riprap in the channel downstream of the spillway chute. This riprap should be relatively large in size in order to be stable at times of high flow velocities.

Any further information concerning this matter which you might desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

By \_\_\_\_\_

Chairman

GHN/f

C.D. Chicopee  
Dec. 12, 1956

K-V Realty Corp.  
1160 Bay St.  
Springfield, Mass.

Gentlemen:

I have received two plans showing a temporary sanitary sewer connecting Mountainview Acres trunk sewer to Irene Street sewer in Chicopee. One of the drawings submitted is a plan and profile of the proposed sewer, while the other drawing shows details for the inlet and outlet chambers for a temporary inverted siphon across the dam at Roberts Pond.

These plans were left at our office for review and approval. I am not certain what approval is wanted in regard to these plans. Since I was out of the office the day the plans were left, I did not have an opportunity to discuss the plans with your representative.

Our interest in connection with this proposed temporary sanitary sewer is to be certain that any construction carried on at Roberts Pond Dam does not endanger the safety of this structure. Consequently, in order to review these plans, in connection with the safety of the dam, it will be necessary to provide much more detail than is included on the drawings. From the drawings it would appear as if the location of the two sewers will be on the centerline shown on the plan section of the plan profile. The profile shows the two sewers passing under the spillway channel. Detailed construction drawings will be necessary to show the method of passing under this spillway and the manner in which the work is to be done to guarantee that the spillway will not crack or settle. The location of the pipelines in regard to one another, both horizontally and vertically should be shown. We would also be interested to know how the excavation will be carried on and how the material would be replaced.

Thus, we are primarily interested in the detailed plans and specifications for all construction that will be taking place from about sta. 6 to about sta. 11. Any blowoffs or drains connected with the pipeline should be included in the detailed plan. In submitting data to us for review and recommendation you should keep in mind that all information necessary to show work being done on the dam proper that might endanger the structure should be presented in detail both in plan form and written specifications.

Very truly yours,

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G. H. McDonnell  
County Hydraulic Engineer

GHM/f

WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING  
ELECTRICAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

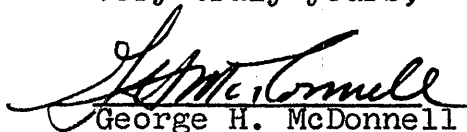
C.D. Chicopee  
Dec. 12, 1956

The Hon. The Board of County Commissioners  
Hampden County Court House  
31 Elm St.  
Springfield, Mass.

Gentlemen:

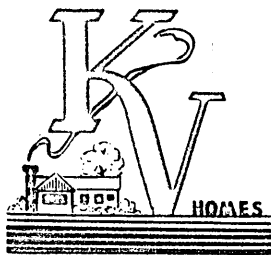
Enclosed is a copy of a communication sent to the K-V Realty Company regarding a very preliminary set of plans left at this office by messenger, showing a proposed pipeline to be constructed across Roberts Pond Dam in Chicopee for the purpose of conveying sanitary sewage from a development to be built by the K-V Realty Company to an existing sewer on Irene Street. The contents of this letter are self-explanatory.

Very truly yours,



George H. McDonnell  
County Hydraulic Engineer

GHM/f



NORMAN B. KEDDY  
GEORGE VADNAIS

# Kay-Vee Realty Company, Inc.

1160 BAY STREET - SPRINGFIELD 9, MASSACHUSETTS

TELEPHONE RE 3-7851

December 3, 1957

Office of County Commissioners  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

In compliance with your letter received November 20, 1957, in which you stated that your engineer had noted the conditions existing at Roberts Pond in Willimansett.

He made specific mention of certain maintenance and repair work needed in connection with the spillway.

The riprap which he recommended to be placed immediately at the right side of the receiving channel has been completed and was brought up to the grade at the end of the concrete chute.

We would appreciate having your engineer at his convenience recheck this location and advise, if it meets with his approval.

Very truly yours,

KAY-VEE REALTY COMPANY, INC.

By: Edgar A. Barre  
Edgar A. Barre,  
Sales Manager

EAB:bar

Copy of this letter mailed to George H. McDonnell,  
County Hydraulic Engineer, on December 4, 1957.



WATER SUPPLY  
SEWERAGE  
SEWAGE DISPOSAL  
STRUCTURAL ENGINEERING  
ELECTRICAL ENGINEERING

**TIGHE & BOND, Inc.**  
**CONSULTING ENGINEERS**  
BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991  
GEORGE H. McDONNELL  
PHILIP W. SHERIDAN

DAMS & POWER INSTALLATIONS  
HIGHWAYS & BRIDGES  
HOUSING DEVELOPMENT  
WASTE DISPOSAL

May 2, 1958

The Hon. Board of County Commissioners  
Hampden County Court House  
Elm Street  
Springfield, Mass.

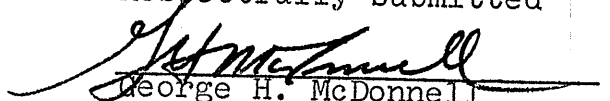
Gentlemen:

On Monday, April 28, 1958, the undersigned inspected the dam at Roberts Pond in the Willimansett section of Chicopee and found that certain work requested in the past had been done by the Owner of the structure. The dam itself was in relatively good condition. However, surface runoff from elevated ground adjacent to the dam on the north side was washing down over the surface of the dam and causing a gulley to be formed on the loose sandy fill of the upstream face.

It would seem advisable to notify the Owner that drainage of surface water onto the top of the dam should be prevented by the construction of proper ditches on natural ground at the north end of the dam that would divert storm water flow either into the pond on natural ground or into the brook below the dam while passing over natural ground.

There is considerable housing construction that has been carried on in the vicinity of the dam and it is anticipated that the rate of surface runoff will be increased somewhat by this construction. It is imperative that the dam be kept in good condition and that the Owner provide some means of operating the gate in the drawoff pipe in time of extreme storm to be certain that water level in the pond does not rise too high. Should a flash flood of the type experienced in 1955 occur again, the safety of this structure could be improved by having a responsible person immediately available to open the drawoff gate and thus provide additional capacity for passing flows thru and over the dam.

Respectfully submitted

  
George H. McDonnell  
County Hydraulic Engineer

GHM/cmb

May 7, 1958

K/V Realty Corporation  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam at Roberts Pond in the Willimansett section of Chicopee has been inspected recently by our Engineer and the following conditions have been noted and pointed out to this Board.

Surface water runoff from natural ground on the northerly end of the dam runs onto the dam and causes a gulley to form on the upstream face of the structure. Surface water should not be allowed to run onto the top of the dam. The only surface water on the dam should be that falling directly onto the structure during a rainstorm. Water from adjacent areas should be diverted from the dam by either ditching or diking and all surface flows should be made to flow over natural ground into the pond area or into the brook at a distance downstream from the dam. Will you kindly have this matter taken care of so that there will be no further erosion on the dam?

With the development of the land area adjacent to the pond, it can be expected that the rate of surface runoff will increase somewhat. It would be advisable to keep the level of the pond as low as possible except during those periods of the year when the pond is being used for definite recreational purposes.

A responsible member of your corporation should be assigned to seeing that the dam is properly maintained and to operate the gate on the draw-off pipe thru the dam as necessary to aid in passing flood flows. This dam is immediately upstream from a built-up section of Willimansett and consequently, all safety factors must be considered and all precautions must be taken to guaranty the safety of the dam. Will you kindly notify our hydraulic engineer, Mr. George H. McDonnell at Bowers & Pequot Sts. in Holyoke, Mass. or notify this office of the person who is to be responsible for the operation of the gate and the maintenance of the dam.

Any further information concerning this matter which you might desire will be furnished by this office upon request.

Very truly yours  
BOARD OF COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

Dec. 17, 1958

K-V Realty Corporation  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located in Willimansett on the pond formally known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"A fence has been constructed by the owner along the downstream edge of the top of the dam. No gate is located in the fence to allow for ease of access to the spillway channel and the spillway chute itself. A gate should be installed in this fence and, if the gate is to be kept locked, keys should be immediately available for anyone making inspections or required to do emergency work.

A wire screen and projecting sticks extending under the spillway channel bridge and blocking a portion of the spillway channel itself should all be removed. There should be no obstruction under this bridge that would act to collect debris and thus impede the passage of flood water.

Sand washed into the spillway channel should be cleaned out and the channel returned to its proper capacity.

The embankment of the dam should be cleared of all tree and brush growth and the growth of a good thick sod should be encouraged.

Gullies on the surface of the embankment as the result of surface wash should all be filled in and this washed condition corrected.

The masonry spillway overflow chute and the construction at the bottom of the chute was satisfactory at the time of the last inspection. "

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

**CONSULTING ENGINEERS**

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

CD Chicopee  
April 9, 1959

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

The Hon. the Board of County Commissioners  
Hampden County Commissioners  
Springfield, Massachusetts

Gentlemen:

The dam at Roberts Pond in Willimansett now owned by K-V Realty Corporation of 1160 Bay Street, Springfield, Mass., was recently inspected by the undersigned.

A reinspection of the Roberts Pond Dam shows that the owner has not complied with the requirements as set forth in your communication of December 17, 1958. The fence constructed along the downstream edge of the dam is a solid fence with no gate located so as to allow for easy access to the spillway channel and the spillway chute itself for inspection and maintenance purposes.


Objects projecting from the spillway channel bridge and blocking a portion of the spillway channel itself are still in place. The spillway channel should be cleared of all debris and objects so that free flow in the entire cross sectional area of the spillway channel can occur.

The dam embankment should be cleared of tree and brush growth and a thick sod should be built up thru loaming, fertilizing and seeding. This sod should cover the downstream face of the dam.

Gullies on the surface of the embankment still exist and surface drainage should be provided to prevent surface water from washing over and onto the dam embankment itself.

It is recommended that the owner be urged to comply with the above as soon as possible.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mb

April 15, 1959

K-V Realty Corporation  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located in Willimansett on the Pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"A reinspection of the Roberts Pond Dam shows that the owner has not complied with the requirements as set forth in your communication of December 17, 1958. The fence constructed along the downstream edge of the dam is a solid fence with no gate located so as to allow for easy access to the spillway channel and the spillway chute itself for inspection and maintenance purposes.

Objects projecting from the spillway channel bridge and blocking a portion of the spillway channel itself are still in place. The spillway channel should be cleared of all debris and objects so that free flow in the entire cross sectional area of the spillway channel can occur.

The dam embankment should be cleared of tree and brush growth and a thick sod should be built up thru loaming, fertilizing, and seeding. This sod should cover the downstream face of the dam.

Gullies on the surface of the embankment still exist and surface drainage should be provided to prevent surface water from washing over and onto the dam embankment itself."

The correction of the conditions as reported by the County Hydraulic Engineer should be attended to immediately. Kindly take the necessary action to carry

out these recommendations so that the safety of your dam may be improved and the structure meet the requirements of good maintenance and operation.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BD. OF COUNTY COMMISSIONERS

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# **Mountain Lake, Inc.**

*Advertising and Construction Specialists*

*Rec'd  
April 21, 1959*

RICHARD D. VADNAIS  
President

1160 BAY STREET  
SPRINGFIELD, MASS.

REpublic 3-7851

April 17, 1959

Office of the County Commissioners  
County of Hampden  
37 Elm Street  
Hampden, Massachusetts

Gentlemen:

This is to inform you that we are in receipt of your letter dated April 15, 1959, regarding Roberts Pond Dam.

The work which you requested to be done will be started as soon as possible.

This is to inform you also that this property is now owned by Mountain Lake, Inc.

Sincerely yours,

MOUNTAIN LAKE, INC.

By:

*Richard D. Vadnais*

Richard D. Vadnais  
President

RDV:bar

Copy of this letter mailed to George H. McDonnell, County Hydraulic Engineer, on April 21, 1959.



Dec. 23, 1959

K-V Realty Corp.  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located in Willimansett on the pond formally known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The gate recommended for installation in the fence has been erected and is satisfactory. The screen wire across the spillway channel at the bridge location acts as a debris catcher and should be removed. There should be no obstruction to the flow of water in the spillway channel.

All brush and miscellaneous tree growth on the face of the dam should be cut and the turf on the downstream face of the dam should be improved thru fertilizing and the application of loam and seed as needed.

On the date of the last inspection in December, the water level was found to be about one foot below spillway crest. The drawoff gate was open about 6" more or less and the normal flow of the brook passed thru the drawoff tube.

Heavy riprap should be placed at the bottom of the spillway chute at the end of the concrete paved section so as to prevent any further erosion."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
Feb. 18, 1960

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm St.  
Springfield, Mass.

Gentlemen:

Reference is made to the recent heavy rainstorm and related runoff that occurred on Thursday morning, Feb. 11, 1960. On that day, the undersigned was attending a conference in Boston in the office of the Commissioner of the Department of Public Works of the Commonwealth of Massachusetts. Consequently, calls in connection with problems related to streams and dams were handled by personnel of our office.

Late in the morning on Feb. 11, a call came in pertaining to the flooding of the brook in Willimansett downstream of Roberts Pond and in the vicinity of Montgomery St. Mr. Andros of our office investigated and reported to me as follows. Upon inspecting Roberts Pond Dam in the Fairview section of Chicopee, just upstream from Willimansett, the water level behind the dam was found to be approximately 3' below the top of the earth embankment. Approximately 8" to 10" of water was flowing over the crest of the spillway chute. The water surface in the spillway was about 2.4 ft. below the underside of the roadway bridge girder that spans the spillway. During the heavy runoff, the spillway was found to be in satisfactory condition and there was no evidence of any settling or sliding in the spillway or at the chute.

Very little water was passing thru the drain tube in the dam as the gate appeared to be in very nearly closed position.

On the downstream side of the northerly end of the earth embankment forming the dam, a washout of about 10 cubic yards to 15 cubic yards in size had occurred as the result of surface runoff accumulating in this area. The washout was not serious enough to weaken the dam. However, if the rainstorm had persisted for a long time or the rate of rainfall had increased greatly, the size of the washout could have been enlarged and the earth embankment of the dam might have been endangered. At the

**TIGHE  
& BOND CONSULTING ENGINEERS**

CD Chicopee  
Feb. 18, 1960  
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time of the inspection, the earth embankment of the dam was not in danger.

The owner of the dam should provide proper drainage of surface water and surface water should be diverted from the top of the dam to prevent a recurrence of the washout.

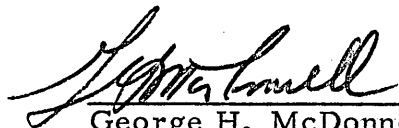
Mr. Helm, a superintendent for the owner of the dam, arrived at the site while our Mr. Andros was present. Mr. Helm was asked to divert the surface water so that it would not accumulate on the end of the embankment of the dam and he was asked to do the work immediately.

At the time of the inspection, the pond was dropping at the rate of about 1" per hour. Downstream in the vicinity of the Tremblay Barrel Co., water was overflowing the brook and causing flood conditions. Consequently, the drawdown gate at Roberts Pond Dam was not opened. There was no danger to the dam and opening of the gate would simply increase flooding downstream.

An inspection of the dam was made at the request of personnel from the Tremblay Barrel Co. Apparently personnel were concerned over the possibility of the dam being washed out.

It is recommended that a communication be sent to the owner of the dam directing that surface drainage at the northerly end of the dam be changed and the drainage properly controlled to prevent the recurrence of the washout. Also, it would seem advisable to again request the owner of the dam to draw down the pond during the fall, winter and spring months, if he plans no particular use for the water during those seasons of the year. By keeping the pond empty, the volume of the pond could act as storage for high rates of runoff and thus, decrease to some extent, during certain rainstorms, flooding conditions downstream.

Very truly yours,



George H. McDonnell  
County Hydraulic Engineer

GHM/f

CD Chicopee  
Feb. 24, 1960

Mountain Lake, Inc.  
1160 Bay St.  
Springfield, Mass.

Gentlemen:

You are hereby advised that your dam located in Chicopee at the site of the pond formerly known as Roberts Pond, was inspected during the heavy rainstorm of Thursday, Feb. 11, 1960, and your attention is called to conditions that existed as the result of the rainstorm.

Our County Hydraulic Engineer reports a sizeable washout occurred on the downstream face at the northerly end of the dam embankment. Whereas the washout did not endanger the embankment, the continuation of the rainstorm or an increase in the rate of precipitation might have enlarged the washout to a point where the dam embankment could have been endangered.

In order to prevent the recurrence of such a washout and the possible breaching of the embankment of your dam, you are directed to change the grading of the ground in the vicinity of the northerly end of your dam so that all surface runoff will be directed away from the dam. The surface runoff should be directed downstream of the dam at a point far enough to the north where the dam embankment itself will not be endangered. Proper channel or pipe facilities should be provided on the steep portion of the natural or filled slope of the ground so that a concentration of runoff will not cause gullying. If catchbasin facilities are to be included, side inlets should be provided and a design used whereby leaves, twigs, paper and miscellaneous debris will not plug the entrance to the drainage system.

If a chute type of installation is to be considered for carrying the runoff to the brook below the dam, care must be used in constructing this facility so that frost heaves, ground settlement, and the effect of running water as well as the elements will not cause cracking and disintegration of the chute.

Our Board is aware of the fact that the pond formed by the dam is used

Feb. 24, 1960, Cont.

during the summertime for swimming and other recreational purposes. It is possible that no specific use is made of the ponded water during the fall, winter, and spring months. If this is so, it would be advisable for you to drain your pond early each fall and to keep the pond drained thru the months of heavy spring runoff. In that way, maximum safety will be provided at the dam and your facility could be used to reduce runoff conditions in the brook downstream of the dam. If you agree to empty the pond each fall thru the spring months, as was practiced by a former owner, the gate on the tube thru the dam could be left open to a predetermined amount to provide for the direct passage thru the dam of normal brook flow and usual amounts of runoff from average rainstorms.

The County Hudraulic Engineer would be pleased to meet with you to advise you in connection with the construction of proper drainage facilities and to discuss the advantages of draining your pond each fall thru the following spring months.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

Board of County Commissioners

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CD Chicopee  
Feb. 24, 1960

Mountain Lake, Inc.  
1160 Bay St.  
Springfield, Mass.

Gentlemen:

You are hereby advised that your dam located in Chicopee at the site of the pond formerly known as Roberts Pond, was inspected during the heavy rainstorm of Thursday, Feb. 11, 1960, and your attention is called to conditions that existed as the result of the rainstorm.

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In order to prevent the recurrence of such a washout and the possible breaching of the embankment of your dam, you are directed to change the grading of the ground in the vicinity of the northerly end of your dam so that all surface runoff will be directed away from the dam. The surface runoff should be directed downstream of the dam at a point far enough to the north where the dam embankment itself will not be endangered. Proper channel or pipe facilities should be provided on the steep portion of the natural or filled slope of the ground so that a concentration of runoff will not cause gullying. If catchbasin facilities are to be included, side inlets should be provided and a design used whereby leaves, twigs, paper and miscellaneous debris will not plug the entrance to the drainage system.

If a chute type of installation is to be considered for carrying the runoff to the brook below the dam, care must be used in constructing this facility so that frost heaves, ground settlement, and the effect of running water as well as the elements will not cause cracking and disintegration of the chute.

Our Board is aware of the fact that the pond formed by the dam is used

Feb. 24, 1960, Cont.

during the summertime for swimming and other recreational purposes. It is possible that no specific use is made of the ponded water during the fall, winter, and spring months. If this is so, it would be advisable for you to drain your pond early each fall and to keep the pond drained thru the months of heavy spring runoff. In that way, maximum safety will be provided at the dam and your facility could be used to reduce runoff conditions in the brook downstream of the dam. If you agree to empty the pond each fall thru the spring months, as was practiced by a former owner, the gate on the tube thru the dam could be left open to a predetermined amount to provide for the direct passage thru the dam of normal brook flow and usual amounts of runoff from average rainstorms.

The County Hudraulic Engineer would be pleased to meet with you to advise you in connection with the construction of proper drainage facilities and to discuss the advantages of draining your pond each fall thru the following spring months.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

Board of County Commissioners

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Nov. 30, 1960

Mountain Lake Inc.,  
1160 Bay Street  
Springfield, Mass.

Att: R. D. Vadnais, Pres.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formally known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The spillway approach channel should be cleaned of all deposits and properly shaped. All obstructions to the flow of water in the channel should be removed. Overhanging trees should be cut and trimmed.

The spillway chute is undermined at the foundation adjacent to the top left side of the masonry. This undermining should be corrected immediately and proper repairs made to protect the foundation. Riprap and grouted stone at the end of the spillway chute is undermined and repairs are needed. The riprap at the end of the chute should be improved, enlarged and extended.

The dam embankment should be brushed and cleared of large trees. The embankment face should be loamed and the loam properly fertilized and seeded to result in the formation of a good thick growth of sod.

When last inspected the pond was found to be about 3-inches below the level of the spillway crest. The drawdown gate was found to be open a few inches and flow of the brook into the pond was about equal to the quantity of water released by the slightly opened drawdown gate.

The pond should be drawn down slowly and, once emptied, the gate should be left open about one-half until such time as the dam embankment, the spillway channel and the spillway chute are properly repaired."



Conditions at this dam are such that repairs should be made as soon as possible, if you wish to maintain a normal water level in the pond upstream of the dam.

Failure of this dam at a time when the pond is full could do much damage downstream and cause loss of life. Therefore, it is essential that the dam, the spillway channel and the spillway chute itself be maintained in proper condition. No doubt work being planned on the flood control project for Willimansett Brook may include changes at your dam. However, until such time as these changes can be made, the dam must be maintained in proper condition, if water is to be stored in the pond.

- Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# ***TIGHE & BOND***

***CONSULTING ENGINEERS***

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
Apr. 3, 1961

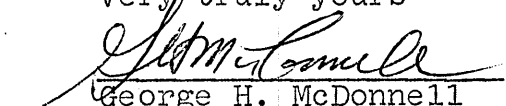
The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

I noted in a press release recently, that plans for the proposed flood control project in Willimansett have been completed and that bids on the work are to be called for in the near future. I am of the opinion that plans for this work may include certain changes and alterations to the Roberts Pond dam and spillway. Consequently, I have written to the Division of Waterways pointing out that if a change is to be made in the dam and spillway, plans and specifications thereof should probably be submitted to your Board for review.

Enclosed is a copy of my letter to the Waterways Division of the Department of Public Works, Commonwealth of Massachusetts for your files. The contents are self explanatory.

Very truly yours

  
George H. McDonnell  
County Hydraulic Engineer

GHM/cmb  
enc.



*The Commonwealth of Massachusetts*

*Department of Public Works*

*Division of Waterways*

*100 Nashua Street, Boston 14*

April 6, 1961

Mr. George H. McDonnell  
Count, Hydraulic Engineer  
Hampden County  
Tighe & Bond  
Bawers & Pequot Streets  
Holyoke, Mass.

Dear Sir:

Reference is made to your letter of April 3, relative to a proposed flood control project in the Willimansett section of the city of Chicopee.

No work is proposed on the so-called Roberts Pond dam or spillway.

Very truly yours,

*RB MacKinnon*

ROBERT B. MACKINNON  
Chief Waterways Engineer

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

**CONSULTING ENGINEERS**

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SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
April 13, 1961

*Robert Pond  
Dam*

The Hon. the Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

Gentlemen:

Reference is made to the Roberts Pond Dam in Willimansett and previous recommendations for necessary work at this dam in connection with making the structure safe. The undersigned has not recommended that the Owner of the dam be directed to proceed immediately with the necessary repairs, since there was a question in my mind that the Willimansett Flood Control project might extend back to the dam and include the dam in the flood work construction.

Plans for the flood work have not been prepared and I contacted the Public Works Dept., Div. of Waterways for information regarding changes or improvements to the dam that might result due to the flood control project.

Mr. MacKinnon, Chief Waterways Engineer, notifies me, and I quote: "No work is proposed on the so-called Roberts Pond Dam or spillway."

In view of this fact, I believe a communication should be forwarded to the Owners of Roberts Pond Dam advising them that repair work as previously recommended must be made this Spring or the pond drawn down and kept drawn down until the work has been approved and accepted by the County.

Very truly yours,

*George H. McDonnell*  
George H. McDonnell

County Hydraulic Engineer

MEMO

From: TIGHE & BOND, Cons. Eng'rs.

Job No. CD Chicopee

To Miss Neilson  
(Company)

Location \_\_\_\_\_

Given to \_\_\_\_\_

Station \_\_\_\_\_

Subject Dating of letter to Bd of County Comms

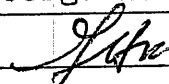
Date April 13, 1961

You will note that I have dated this letter Tuesday, April 18, 1961.

Since next Wednesday is the 19th and thus a holiday, I am taking  
a chance that the Board may be meeting on the 18th. If this date is  
not right, would you please just change the date to conform with  
whatever day the County Commissioners actually sign the letter?

Thank you.

George H. McDonnell



Signed \_\_\_\_\_

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

**CONSULTING ENGINEERS**

*Roberts Pond  
Willimansett*

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
May 10, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm St.  
Springfield, Mass.

Gentlemen:

On Thursday afternoon, May 4, 1961, I met with Mr. Vadnais of the Mountain Lake Corp., and also with Mr. Joseph Nigro of 476 Main St., West Springfield, the new owner of the dam at Roberts Pond in the Willimansett section of Chicopee. For a number of years the dam and pond have been owned by Mountain Lake, Inc. Ownership is now passing, or has already passed, to Mr. Joseph Nigro. Mr. Nigro wished to know what had to be done to put the dam and spillway in good condition. I pointed out the various things and the needed work as outlined in your letter to Mountain Lake, Inc., dated Nov. 30, 1960. Also, I pointed out to Mr. Nigro that the gate at the dam has recently been closed and that water is being ponded in spite of your letter of April 18, 1961 wherein Mountain Lake, Inc. was told that the pond should be kept drawn down and the gate partially opened so that the normal dry weather flow of the stream can pass thru the conduit in the embankment and storm water runoff can be temporarily stored in the basin wherein the pond is normally formed.

It is recommended that a communication be sent to Mr. Nigro pointing out to him personally the necessary work to be done at this dam and the fact that the pond should be kept drawn down until the work has been completed.

Very truly yours,

*George H. McDonnell*  
George H. McDonnell

County Hydraulic Engineer

GHM/f

CD Chicopee  
May 10, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm St.  
Springfield, Mass.

Gentlemen:

On Thursday afternoon, May 4, 1961, I met with Mr. Vadnais of the Mountain Lake Corp., and also with Mr. Joseph Nigro of 476 Main St., West Springfield, the new owner of the dam at Roberts Pond in the Willimansett section of Chicopee. For a number of years the dam and pond have been owned by Mountain Lake, Inc. Ownership is now passing, or has already passed, to Mr. Joseph Nigro. Mr. Nigro wished to know what had to be done to put the dam and spillway in good condition. I pointed out the various things and the needed work as outlined in your letter to Mountain Lake, Inc., dated Nov. 30, 1960. Also, I pointed out to Mr. Nigro that the gate at the dam has recently been closed and that water is being ponded in spite of your letter of April 18, 1961 wherein Mountain Lake, Inc. was told that the pond should be kept drawn down and the gate partially opened so that the normal dry weather flow of the stream can pass thru the conduit in the embankment and storm water runoff can be temporarily stored in the basin wherein the pond is normally formed.

It is recommended that a communication be sent to Mr. Nigro pointing out to him personally the necessary work to be done at this dam and the fact that the pond should be kept drawn down until the work has been completed.

Very truly yours,

---

George H. McDonnell  
County Hydraulic Engineer

GHM/f

May 10, 1961

Mr. Joseph Nigro  
476 Main Street  
West Springfield, Mass.

Dear Sir:

In accordance with the provisions of Chapt. 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that the dam you have just acquired or are in the process of acquiring, at Roberts Pond in Willimansett, from Mountain Lake Inc., of Springfield, Mass. is in need of certain maintenance and repairs. Consequently, if the dam is to remain active and a pond to be formed, these repairs must be done as soon as possible.

- a) The spillway approach channel should be cleaned of all deposits of sand and other materials. The channel should be properly shaped. All obstructions to the flow of water in the channel should be removed and overhanging trees, as well as brush, cut. No obstruction in the form of wire netting or related supports should be in the channel. The foot bridge, if to remain in place, should span the entire channel so as not to present any pier to impede flow or hold debris.
- b) The spillway chute is undermined at the foundation adjacent to the top left side of the masonry. This undermining must be corrected immediately and proper repairs made to protect the foundation from further undermining. Soft and unsuitable earth should be excavated by hand from the cavity and the cavity packed with either mass concrete or a mixture of sand, clay and gravel. The slope of the embankment to the left of the left spillway chute wall should be cut back and then covered with gravel so as to properly protect the spillway from further undermining.
- c) The downstream face of the dam embankment should be cleared of all brush and large trees. The embankment face should be loamed where necessary and the loam properly fertilized and seeded to result in the formation of a good thick growth of sod. Throughout the year brush and any tree growth that starts again should be cut down.



2.  
May 10, 1961

- d) Riprap and grouted stone at the end of the spillway chute will become undermined and in a poor state of repair following reactivation of the spillway chute for a period of a month or two. At that time, it will be necessary to place additional heavy riprap to guarantee protection of the end of the spillway chute masonry.

On April 18, 1961, a communication was sent to the then owner of the dam, Mountain Lake Inc., regarding the repairs and maintenance work as outlined hereinabove and regarding the need for maintaining the pond empty until the repair work has been completed. From the letter of April 18, 1961 to Mountain Lake Inc., we quote the fourth paragraph from the bottom of page 1 and the paragraph on page 2.

"Until such time as the dam and spillway are put in good condition and meet requirements for safety, the pond should be kept drawn down and the gate partially opened so that the normal dry weather flow of the stream can pass thru the conduit in the embankment and storm water runoff can be temporarily stored in the basin wherein the pond is normally formed.

If you plan to draw down the pond completely by opening the conduit gate, we remind you that the gate should be opened very slowly and over a long period of time, so that sudden release of water from the pond will not result to cause flooding downstream. An inch or two of additional gate opening each day would be the maximum rate of opening advisable to prevent a sudden increase in brook flow downstream. This slow rate of gate adjustment can be made at any time you so desire.

As Owner of this dam, you should be aware of the problems of flood control downstream in Willimansett where the brook is shallow and narrow. Any sudden increase in flow in the brook can cause flooding of property downstream. Consequently, you should never open the gate at the dam to release a large quantity of water. Any operation of the gate should be as described hereinabove, wherein the gate opening is increased only an inch or two each day until such time as the gate is open enough to cause slow pond drawdown.

If you have any question in connection with this matter, please contact our Board or the County Hydraulic Engineer, George H. Mc Donnell at Holyoke, JE 3-3991.

Very truly yours  
BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

May 22, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Mass.

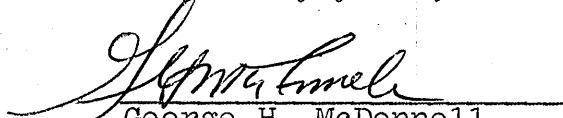
Gentlemen:

The undersigned inspected Roberts Pond Dam on Friday afternoon, May 19, 1961, for the purpose of determining whether or not the Pond is being kept drawn down pending the completion of certain recommended maintenance and repair work as set forth in your communication of November 30, 1960 to Mountain Lake, Inc., your letter of April 18, 1961 to Mountain Lake, Inc., and your letter of May 10, 1961 to a Mr. Joseph Nigro of West Springfield, the man contemplating purchasing the dam and property from Mountain Lake, Inc.

Since the pond is being maintained at or near full elevation, and since the work as recommended in the spillway, at the spillway chute, and at the dam has not been done, it would be advisable to dispatch another communication to Mountain Lake, Inc., directing that they draw down the pond and keep the pond drawn down until repair work has been completed and is acceptable to your Board.

It is possible that the property has been transferred from Mountain Lake, Inc., to Mr. Joseph Nigro. Thus, it would be advisable to direct that Mountain Lake, Inc. advise you in writing, by return mail, as to whether or not the Corporation is still the owner.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM:mh

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

**CONSULTING ENGINEERS**

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
May 31, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

The following is a progress report in connection with the needed repairs and the lowering of the water level in Roberts Pond dam, in the Willimansett section of the City of Chicopee.

In view of the fact that the present owner, Mountain Lake, Inc., had been directed by your Board to either lower the pond or repair the dam immediately, I made an inspection of the dam on Friday afternoon, May 26, 1961. At 3:00 P. M. I found that the dam was impounding a full pond of water and that a sizeable discharge was taking place over the spillway. A check of conditions at the dam showed that a majority of the necessary clearing on the downstream face of the embankment had been accomplished, but that little or nothing had been done in the spillway to clean and clear the spillway channel of debris, silt and overhanging brush. An examination was made of the spillway chute foundation where a cavity of considerable size had been noticed and reported previously. When standing at the top of the earth bank to the west of the spillway chute, there appeared to be a sizeable mass of concrete packed into what had been the void. I examined this concrete mass at close hand, and it appeared odd that surface cracks were evident. Also, adjacent to the void location there was no evidence of any excavated material having been dug out to properly prepare the void for plugging with concrete. On digging with my hand and by simply kicking with my foot, I found that the concrete exposed to view was nothing more than a cheap, sand cement plaster placed on top of a mixture of brush, debris, sod and earth, which in turn had been used to plug only the opening of the huge void under the masonry spillway chute. It can only be concluded that the person or persons responsible for the placing of the concrete

CD Chicopee  
May 31, 1961

had in mind the thought to cover over the void in a cheap and sloppy manner so as to make it appear as if proper repair work had been accomplished. It is evident that little or no thought was given to the safety of persons and property located in the densely populated area of Willimansett directly downstream.

I immediately contacted the office of the owner of the dam by telephone and could only reach one of the secretaries. I left orders with the secretary to notify either Mr. Vadnais or Mr. Keddy that the water behind the dam must be lowered immediately or that I would recommend that the County bring immediate action against them as owners of the dam for endangering the lives and property of people downstream. I pointed out in my telephone conversation that the matter was serious enough to immediately bring it to your attention.

Mr. Keddy was apparently reached during the latter part of the afternoon by the office personnel for he contacted my home by phone at about 6:30 PM. I explained to Mr. Keddy that in trying to make the repair work appear sound, the workman was endangering the lives of all people downstream in the built-up section of Willimansett; that such a condition could not be tolerated and that immediate action was necessary. Mr. Keddy agreed to draw the pond down and to meet me at the site on Saturday morning at 9:30.

I arrived at the dam at 9:30 and found five men at work trying to open the gate on the drawdown conduit. It had been opened but a few inches and the operating mechanism was in such a poor state of repair that the gate could not be opened properly. Thru makeshift methods, the gate was opened enough to cause a small discharge thru the conduit but not enough of a discharge to stop water from going over the spillway. It was agreed that the workmen would dismantle the gate-operating mechanism, bring it to a repair shop for rebuilding and return it as soon as possible to the dam so that the gate could be further opened. Mr. Richard Vadnais and Mr. Keddy accompanied me to the site of the spillway cavity and I pointed out in detail the sloppy manner in which the work had been done. I told them that, in my opinion, those responsible were guilty of criminal negligence in endangering the downstream citizens. I instructed Mr. Keddy and Mr. Vadnais to get the pond drawn down as soon as possible and to excavate the cavity under the spillway but, that no concrete whatsoever was to be placed in the cavity until after it had been properly cleaned down to solid earth. I was to be called then so that I could make a personal in-

**TIGHE**  
**& BOND** CONSULTING ENGINEERS

3.  
CD Chicopee  
May 31, 1961

spection and be present to see the concrete packed into the void.

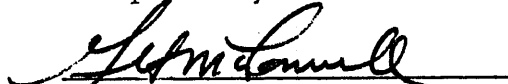
On Monday, May 29, 1961, the site was again inspected in the afternoon. Work had not been started on cleaning the void because a small trickle of water still passed over the spillway. The gate operating mechanism had not been repaired and returned. Thus, the gate could not be opened more. In discussing this matter with Mr. Keddy by phone, it was agreed that no work would be done on excavating the void to properly prepare it for the concrete patch until the area was thoroughly dried and until the pond could be drawn down sufficiently to allow the area to dry.

The undersigned will inspect the dam daily for the next few days to check on progress, especially in the lowering of the water level behind the dam.

If full cooperation is not received from the owners, I believe it may be necessary that proper legal action be instituted against the owners, to get the pond empty.

The present owner has been told time and time again, both verbally and thru communications, of the dangerous condition that exists at this dam if the pond is filled without making proper repairs to the structure. I believe that more than ample time has been allowed the owner to make the repairs and that in view of the way in which the cavity under the spillway was hidden, firm and decisive action should be taken if needed.

Respectfully submitted

  
George H. McDonnell  
County Hydraulic Engineer

GHM/cmb

**MEMO**

TIGHE & BOND, Cons. Eng'rs, Holyoke, Mass.

Hampden County Dar

Job No. \_\_\_\_\_

To County Commissioners, Hampden County \_\_\_\_\_

Date 5/31/61 \_\_\_\_\_

#####  
Where you were out \_\_\_\_\_

Time 4:30 PM \_\_\_\_\_

of \_\_\_\_\_

Tel. No. \_\_\_\_\_

Message: Enclosed is a copy of a letter sent to the owner of the Roberts Pond \_\_\_\_\_

Dam in the Willimansett section of Chicopee. In view of the problem \_\_\_\_\_  
of getting work done at this dam I felt that the enclosed should be in \_\_\_\_\_  
your file. \_\_\_\_\_

Signed G. H. McDonnell \_\_\_\_\_

Disposition: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signed \_\_\_\_\_

May 22, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Mass.

Gentlemen:

The undersigned inspected Roberts Pond Dam on Friday afternoon, May 19, 1961, for the purpose of determining whether or not the Pond is being kept drawn down pending the completion of certain recommended maintenance and repair work as set forth in your communication of November 30, 1960 to Mountain Lake, Inc., your letter of April 18, 1961 to Mountain Lake, Inc., and your letter of May 10, 1961 to a Mr. Joseph Nigro of West Springfield, the man contemplating purchasing the dam and property from Mountain Lake, Inc.

Since the pond is being maintained at or near full elevation, and since the work as recommended in the spillway, at the spillway chute, and at the dam has not been done, it would be advisable to dispatch another communication to Mountain Lake, Inc., directing that they draw down the pond and keep the pond drawn down until repair work has been completed and is acceptable to your Board.

It is possible that the property has been transferred from Mountain Lake, Inc., to Mr. Joseph Nigro. Thus, it would be advisable to direct that Mountain Lake, Inc. advise you in writing, by return mail, as to whether or not the Corporation is still the owner.

Very truly yours,

---

George H. McDonnell  
County Hydraulic Engineer

GHM:mh

*Shaffer*

May 24, 1961

Mountain Lake, Inc.  
1160 Bay Street  
Springfield, Mass.

*C. C. C.*

Gentlemen:

The County Hydraulic Engineer has submitted a report to this Board stating that when making an inspection on Friday afternoon, May 19, 1961, your dam at Roberts Pond was impounding water to about spillway height in spite of our communication dated April 18, 1961 wherein, at the bottom of Page 1, last paragraph, we stated:

"Until such time as the dam and spillway are put in good condition and meet requirements for safety, the pond should be kept drawn down and the gate partially opened so that the normal dry weather flow of the stream can pass thru the conduit in the embankment and storm water runoff can be temporarily stored in the basin wherein the pond is normally formed."

Recently, the County Hydraulic Engineer informed us that ownership of the property may pass to a Mr. Joseph Nigro of 476 Main Street, West Springfield, Mass. If transfer of the property has been made and you are no longer the Owner, please so notify us in writing by return mail. Also state the date when ownership of the property changed.

On the assumption that the property is still owned by your Corporation, you are directed to comply with the previous recommendation to draw down the pond and keep it drawn down until repairs to the spillway, spillway chute, and the dam have been completed and are acceptable to this Board.

In drawing down the pond, you are reminded that the gate should be opened very slowly and over a long period of time so that sudden release of water from the pond will not result in flooding conditions downstream. An inch or two of additional gate opening each day would probably be the maximum rate of



opening advisable to prevent a sudden increase in brook flow downstream. Your maintenance man at the dam is well aware of the proper manner in which the gate should be operated.

The dam in question impounds a sizable wall of water and its location directly above the densely populated section of Willimansett necessitates that this dam always be maintained in an excellent state of repair or the pond kept empty.

Please notify this Board in writing of the date you begin to open the drawdown gate.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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COPY

CD Chicopee  
May 31, 1961

Mountain Lake, Inc.,  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

The undersigned inspected the Roberts Pond Dam in the Willimansett section of Chicopee on Wednesday morning, May 31, 1961, for the purpose of determining what progress, if any, had been made in connection with the drawing down of the pond and the repair of the spillway. As of 11 AM, the pond was still at spillway crest.

I recognize the fact that the gate opening is temporarily fixed as the result of having the operating mechanism dismantled. However, the mechanism has now been out of service since noontime on Saturday and should be repaired and returned shortly. A much greater gate opening will be necessary in order to drain the pond below spillway level within any reasonable length of time. Will you kindly notify me by return mail of the date when the gate operating mechanism will be back in service? If much more time is to be lost before the mechanism will be back in service, consideration should be given to obtaining the services of personnel from a gate manufacturing company, such as Chapman Valve, to provide temporary or permanent equipment for operating the gate.

Another method which could be used in raising the gate would be to replace the central ring gear and to provide a lifting force thru the use of hydraulic jacks to pull the gate stem upward.

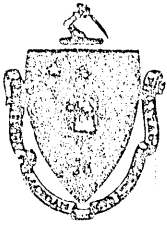
Very truly yours

COPY

GHM/cmb

---

George H. McDonnell  
County Hydraulic Engineer



Commonwealth of Massachusetts

# County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
27 Elm Street

THOMAS F. SULLIVAN  
Chairman  
WILLIAM F. STAPLETON  
RALPH P. WALSH

June 1, 1961

Mountain Lake Inc.  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

Our Board of County Commissioners has notified you in writing previously and the County Hydraulic Engineer has met with you and informed you verbally to draw down the pond at Roberts Dam in the Willimansett section of Chicopee until proper repairs are made to the dam and its appurtenances, and are approved. As reported by the County Hydraulic Engineer as of noon this date the pond has not been drawn down and the broken gate operating mechanism has not been repaired and replaced.

Consequently, in accordance with the provisions of Sections 47 and 48 of Chapter 253 of the General Laws of the Commonwealth of Massachusetts, we have directed the County Hydraulic Engineer to immediately engage the necessary personnel to make the needed repairs to the gate operating mechanism and to lower the pond.

The pond shall not again be filled by either closing the gate or blocking the drawdown conduit until written approval of the Board of County Commissioners has been given and all repairs together with necessary related work have been completed and approved.

A copy of the sections of the law hereinbefore referred to is attached hereto for your information.

Very truly yours,

FOR THE BOARD OF COUNTY COMMISSIONERS

By G. H. McDonnell  
G. H. McDonnell, County Hydraulic Eng'r

## Safety of Reservoirs and Dams

44. Reservoir, etc., Not to Be Constructed or Altered, until.---  
A reservoir, reservoir dam or mill dam shall not be constructed or materially altered until plans and specifications of the proposed work have been filed with and approved by the county commissioners of the county where it is situated. Said commissioners shall retain and record such plans and specifications and shall inspect the work during its progress; and if at any time it appears that the plans and specifications are not faithfully adhered to, they may appoint an inspector to be constantly engaged at the expense of the owners in the supervision of the work. Upon a refusal of the owners or of their agents to adhere to said plans and specifications, said inspector may order the discontinuance of the work. This and the six following sections shall not apply to small dams, constructed for irrigation or for other purposes, the breaking of which would involve no risk to life or property, nor to standpipes or tanks, nor to a dam where the area draining into the pond formed thereby does not exceed one square mile, unless the dam is more than ten feet in height above the natural bed of the stream at any point or unless the quantity of water which the dam impounds exceeds one million gallons.

45. Examination of Reservoir or Dam.---The county commissioners shall, as often as once in two years, cause a thorough examination to be made of every reservoir, reservoir dam and mill dam by the breaking of which loss of life or damage to a road or bridge is likely to be caused, and they shall at any time cause such examination to be made upon written application by the mayor and aldermen of a city or the selectmen of a town where such damage is likely to be caused. Any party whose property is likely to be damaged by the breaking of any such structure may make a written application to the commissioners, setting forth the facts and the ownership of such structure which is believed to be unsafe, and the commissioners may thereupon cause said structure to be examined. If upon examination the structure is deemed safe, the costs of such application and examination may be ordered paid by the party making the application. The commissioners shall cause every examination to be made by a competent engineer who shall report to them in writing whether he considers the structure safe and in good condition, and if not, its condition in detail and the work or the changes required for safety and the public good. The engineer shall be allowed by the commissioners a reasonable compensation for his services which shall be paid by the county in the first instance. Ownership of the structure shall be ascertained and, so far as possible, examinations shall be made in co-operation with the owner or his agent.

46. Alterations or Repairs.---If, upon such examination, the structure is not, in the judgment of the commissioners, sufficiently strong to resist the action of the water under any circumstances which may reasonably be expected to occur, they shall, with the advice of an engineer, determine and direct what alterations or repairs are required to make the structure permanent and secure, and shall in writing order the owners thereof to make such altera-

tions or repairs within a reasonable time, and the results of such examination and the orders thereon shall be duly recorded by said commissioners.

47. Proceedings upon Failure to Comply with Order for Alterations, etc.---If, after notice in writing to the owner of a reservoir or dam which has been so examined and adjudged to be unsafe, the said owner refuses or neglects to make such alterations or repairs as the commissioners order, they may, at the expense of the county, cause such reservoir or dam to be altered and repaired or any part thereof removed or the water drawn off, whichever they may consider necessary for the safety of life, property, roads or bridges on the stream below. After such removal, no structure shall be erected except in compliance with the three preceding sections, and after the water has been drawn off, the reservoir shall not be filled again until the orders of the commissioners have been complied with.

48. Costs.---The commissioners shall make such orders as they may deem just as to the payment by the owner, county or other party of the costs and expenses incurred by them under the three preceding sections, and if the reservoir or dam was adjudged to be unsafe, said costs and expenses may be ordered paid by the owner, with interest, from the time they were paid by the county. Notice shall be given the county treasurer and the owner or other party of the amount due the county.

49. Acts of Commissioners Not to Impair Liability, etc.---No order, approval, request or advice of the county commissioners shall impair the legal duties and obligations of the owners of reservoirs, reservoir dams or mill dams or their liability for the consequences of their illegal acts or of the neglect or mismanagement of their servants or agents.

50. Jurisdiction.---The supreme judicial and the superior courts shall have jurisdiction in equity to enforce the six preceding sections.

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
June 2, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Massachusetts

Gentlemen:

In reference to the problem at Roberts Pond Dam in getting the dam repaired and the pond lowered, I am enclosing a photo copy and a yellow sheet copy of a communication mailed by Special Delivery mail to Mountain Lake, Inc., on the night of June 1, 1961 and a copy of a communication also mailed to Mountain Lake, Inc., during the day on June 2, 1961. The letter mailed on June 1, 1961 was sent via Special Delivery so that it would reach the owner early Friday morning, June 2. The letter mailed June 2 was the original copy of the communication and it was sent by Registered Mail with return receipt.

I had contacted the Chapman Valve Mfg Company and had scheduled their personnel to go to the dam on Friday morning, June 2, 1961 for the purpose of opening the gate with emergency gate operating equipment. The regular gate operating equipment had been broken and removed since Saturday of last week and up to late in the morning of Thursday, June 1, it had not been repaired and returned. The matter of keeping the pond full was a serious one in view of the danger to persons and property downstream. Though a Sunday and a holiday occurred between Saturday and Thursday, this was a long time to have passed without the owner having repaired and returned the gate operating mechanism.

The inspection at the dam conducted at 8:30 this morning showed the pond to be down about 4-inches and the repaired gate operating mechanism back in place. It apparently had been installed following my inspection yesterday, June 1.

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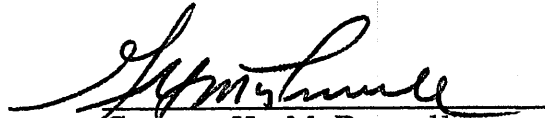
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CD Chicopee  
June 2, 1961

A copy of my letter of transmittal sent with the original copy of your letter is enclosed and is self explanatory. I feel that the pond at this dam should be kept down and all necessary repairs completed before the owner is allowed to reactivate the pond by closing the conduit gate.

I will maintain a daily inspection schedule at the site to be certain that repair work is being done or the pond kept empty.

Very truly yours

  
George H. McDonnell  
County Hydraulic Engineer

GHM/cmb  
encs.

CD Chicopee  
June 2, 1961

Mountain Lake, Inc.,  
1160 Bay Street  
Springfield, Mass.

Gentlemen:

The enclosed is the original copy of the communication sent to you by Special Delivery mail last evening, in connection with the Board of County Commissioners acting under Sections 47 and 48 of Chapt. 253 of the General Laws of the Commonwealth of Massachusetts in connection with your dam at Roberts Pond, in the Willimansett section of Chicopee. The undersigned inspected the dam again this morning at 8:30 AM and found that since the time of my last inspection the gate operating mechanism has been repaired, replaced and the gate opened enough to begin the drawdown of the pond. Personnel engaged by the County for the purpose of installing temporary gate operating equipment will not now be assigned to work at the dam.

The gate is to be kept open and operated in the usual practice for the lowering of the pond. The pond is to be drawn down completely and is to be kept empty until such time as all necessary repairs to the dam and its facilities have been completed.

No repairs at the spillway and under the spillway shall be done without the undersigned first inspecting the entire spillway foundation area after it has been thoroughly excavated and all loose, as well as unsatisfactory material removed and disposed of.

Please have your personnel contact me in advance of when you will be ready for an inspection of the spillway foundation.

Very truly yours

GHM/cmb

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George H. McDonnell  
County Hydraulic Engineer



GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
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SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
June 6, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Mass.

Gentlemen:

The following is a report of progress in connection with repairs and drawing down of the pond at Roberts Pond Dam in the Willimansett section of Chicopee.

The Owner of the pond and dam, Mountain Lake, Inc., had the gate operating mechanism repaired and back in service by late Thursday, June 1, 1961 and drawing down of the pond had actually taken effect so that on Friday, June 2, there was a marked lowering of the water surface. The undersigned made an inspection of the undermined spillway at about noontime on Friday, June 2, 1961 in the presence of Mr. Keddy and certain employees. The workmen had excavated to some extent the cavity under the spillway, had exposed the opening of the cavity and had prepared a form in which concrete was to have been placed. Thru the use of a hand light and by gaining access to the opening of the cavity, I was able to see and point out to the Owner that the cavity is far more serious than had been expected. Back under the spillway the cavity did not terminate but continues as a thin, long and wide opening, resulting in no support for the concrete masonry. The concrete masonry itself looks rough and of poor quality.

I directed that the drawdown gate in the pond be opened wider to hasten the drawing down of the water level but that the opening be controlled so as not to cause flooding along the banks of the brook downstream, particularly at the barrel storage yard and thru the property of the Brewery.

It was pointed out to Mr. Keddy, and his foreman on construction agreed, that because of the massive size of the cavity and the area of unsupported concrete on the spillway, that the best and proper method for repairing the damage was

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& BOND CONSULTING ENGINEERS**

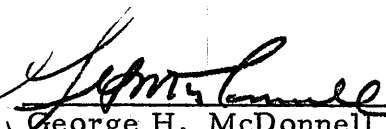
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to actually smash out the concrete of the spillway and to work from above. Otherwise, workmen would of necessity, be working on their hands and knees or on their stomachs crawling under the masonry and the chance of getting a good repair job would be slim. By making sure the pond is empty and then cutting into the concrete floor of the spillway, a proper and good workmanlike repair job can be done.

The dam, spillway, and pond were checked by the undersigned on Saturday, June 3, Sunday, June 4, and again on Monday, June 5, 1961. By 3:00 PM on June 5, the pond was down more than 50% in vertical height and about two-thirds to three-quarters empty from a volume viewpoint. No work was going on at the spillway since the owner had been directed to hold up any spillway work until the pond became empty. It would not be wise to allow the cutting out of concrete on the spillway unless the pond is empty, the drawdown pipe wide open and thus the volume of the pond available for water storage, should a heavy thunder storm or runoff condition occur.

It is expected that by Tuesday morning, June 6, 1961, the pond will be about empty and the undersigned had told the Owner that he may begin to repair the spillway and to break out the undermined concrete at that time.

Respectfully submitted,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mb

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

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CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
June 16, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
Elm St.  
Springfield, Mass.

Gentlemen:

Reference is made to my last communication dated June 6, 1961, pertaining to the problem of properly repairing Roberts Pond Dam in the City of Chicopee, owned by Mountain Lake, Inc.

In the above-mentioned communication, I pointed out on Page 2, last paragraph, the following, "It is expected that by Tuesday morning, June 6, 1961, the pond will be about empty and the undersigned had told the owner that he may begin to repair the spillway and to break out the undermined concrete at that time".

The owner did have a construction crew at the site on Tuesday morning and holes were broken into and thru the top of the concrete spillway for the purpose of determining the size of void. A total of three holes were eventually broken thru the masonry and it was found that the void extended across the entire width of the spillway and down behind the sloping portion of the masonry chute. The workmen cleaned out the void from the three access holes broken thru the masonry and properly prepared the void to be filled with mass concrete.

Throughout the work day, personnel of the owner were working in the approach channel to the spillway cutting trees, digging out excess muck and earth deposits, removing the dangerous small footbridge from over the spillway and clearing the approach channel of miscellaneous debris.

By Wednesday noontime, June 7, 1961, the void at the spillway foundation was ready for concrete. The undersigned was present during the placing of the concrete. The workmen used an electric vibrator and four cubic yards of concrete were placed thru the holes cut in the spillway floor. The concrete was well vibrated and from all appearances the void was 100% filled. The owner and the workmen were very

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CD Chicopee

June 16, 1961

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cooperative in doing an excellent job of repair following the long period of urging and finally the special letter ordering that the repairs would be done by the County.

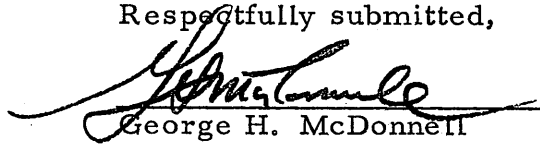
On Wednesday, June 7, the undersigned thoroughly inspected the gate structure, the gate shaft and the drawdown gate itself. The masonry of the gate structure was found to be in good condition. The gate itself was found to be in very good condition, considering its age. The timber and steel were satisfactory. The connection of the shaft to the gate was found to be satisfactory. The gate-operating mechanism as repaired functioned well and is satisfactory.

On June 8, 1961, another inspection of the spillway chute and the approach channel was made. The approach channel had been cleaned and cleared of all material and debris except for one small pile of dirt and one tree. These two items will be taken care of by the owner.

The masonry portion of the upper section of the spillway chute, including the area where repairs had been made on Wednesday, had been thoroughly coated with an asphalt repair material. It had been suggested to the owner that Type I asphalt or some other suitable material be placed on the spalled and water-eroded concrete for protection and sealing purposes. The material as installed appears to be in excellent condition.

In view of the fact that the owner has now complied with all directives and recommendations regarding the repair of the dam and spillway, it is recommended that he be so notified and that the restrictions as placed on the dam per your letter of June 1, 1961, be lifted.

Respectfully submitted,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/f

June 21, 1961

Mountain Lake, Inc.  
1160 Bay St.  
Springfield, Mass.

Gentlemen:

Our Board has received a communication from the County Hydraulic Engineer summarizing the repair work done at your dam at Roberts Pond in the Willimansett section of Chicopee. The County Hydraulic Engineer reports that the cavity under the spillway has now been properly cleaned, investigated and filled with concrete. The spillway approach channel has been cleared and cleaned of mud, muck, debris and obstructions. Also, the masonry spillway chute, upper portion thereof, has been surfaced with an asphalt compound to prevent further erosion and wear of the masonry as well as to seal small cracks wherein water could leak thru the masonry into the foundation area.

The gate structure and the gate itself has been inspected and reported as satisfactory.

In view of the recommendations of the County Hydraulic Engineer that all requested work has now been completed in a good and satisfactory manner, the restriction relating to the operating of the dam as set forth in our letter of June 1, 1961, is hereby lifted and the directive of that date is hereby rescinded.

Periodic inspections will be made of the dam by the County Hydraulic Engineer and it is expected that recommendations regarding maintenance and care of the structure will be followed as submitted to you.

It is our understanding that you plan to dispose of the property in the near future. When a change in ownership takes place, please notify this board.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

CIVIL, SANITARY AND ELECTRICAL ENGINEERING  
INVESTIGATIONS, REPORTS, PLANS AND SPECIFICATIONS  
SUPERVISION OF CONSTRUCTION AND OPERATION

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
Nov. 3, 1961

The Hon. the Board of County Commissioners  
Hampden County Court House  
37 Elm Street  
Springfield, Mass.

Gentlemen:

Inspections recently completed at the various dams situated within the City of Chicopee have now completed the inspection routine in that community and all of the dams located within Chicopee have been examined one or more times during 1961. The following is a report on the condition of the various dams situated in Chicopee.

A. Fairview Fish & Game Club Dams

1. Willimansett Brook Dam This structure has been breached for many years and the opening thru the dam is quite wide and deep. The opening is large enough to pass flood flows without ponding water. The entire pond area is rapidly becoming overgrown with young trees and miscellaneous vegetation. It would appear as if the Owners do not plan to ever rebuild this dam. The site is inspected annually to be certain that no one does close the breach and cause the formation of a pond.
2. Trout Pond Dam This structure was found to be in about the same condition as noted previously. The dam itself is satisfactory but the overflow pipe is poorly arranged to handle storm flows. However, the dam is so small that should it be breached, it would do no damage to persons and property downstream. Also, the dam as existing is too small to come under County jurisdiction. It is inspected annually and reported since it is adjacent to the old Willimansett Brook Dam reported herein above.

B. Langwald Dam

This dam is still breached and no pond is formed. The breach is

very wide and deep. This dam has been breached for many years and the area that was once a pond is now densely wooded. It is doubtful if anyone will ever try to reconstruct the dam at this site.

C. Roberts Pond Dam

The embankment at this dam should be cleared of brush and weed growth in the coming Spring and a good growth of turf encouraged on the downstream face of the embankment.

The top surface of the masonry spillway, just downstream of the crest that was repaired and sealed with an asphaltic compound, is again in need of maintenance and repair. The material installed did not bind well enough and came off during the year. Before the dam is reactivated in the Spring of 1962, the spillway surfacing should be repaired with a material that will bond satisfactorily to the concrete.

At the time of the last inspection, the pond back of the dam was empty and the drawdown gate was partly opened.

D. Hampden Brewing Company Dam

This dam was found to be in satisfactory condition. The structure is well aligned and as existing at the time of the last inspection, considered safe.

E. Wyszatycki Dam

1. Upper Dam This structure was purposely breached some years back and the breach still exists to prevent the ponding of water. The breach is deep enough and wide enough to properly release storm flow.
2. Lower Dam This structure was purposely breached some years back and the breach still exists to prevent the ponding of water. The breach is deep enough and wide enough to properly release storm flow.

F. Veterans of Foreign War Dam

This old concrete masonry dam is in the same general condition as reported in recent years. The pond volume back of the dam is 100% filled with gravel, sand and silt washed down by storm flows.

No water whatsoever is stored by the dam. The masonry chute is broken, dilapidated and has collapsed. The masonry wall of the dam is spalled. However, the structure is still massive and safe. The dam now is nothing more than a waterfall in the brook bed.

G. City of Chicopee Dam

This dam was found to be in very good condition. It was noted that some fill was being placed at the left abutment area but the fill has no bearing upon the dam structure nor on the abutment.

At the right abutment where repairs were recommended a year ago, the joints in the masonry have been repaired and the entire structure well maintained. Brush that was growing from the masonry in the past has all been removed.

H. L. Slate Dam

This small dam was in the same general condition as reported last year. The structure is quite dilapidated but is not dangerous at the present time. Leakage occurs thru the masonry to the left of the spillway but the leakage is negligible and, since the pond formed is small and shallow, any failure of the structure would not cause damage to property nor would lives of persons downstream be endangered.

I. Chicopee Water Department Dams (Now Mass. Dept of Natural Resources)

1. Upper Dam At the time of the last inspection in October, the reservoir was found to be empty and the bottom at the left side of the basin was being cleared of muck, mud, etc. It appeared as if a clean bottom was being formed and shaped. Apparently the Commonwealth of Massachusetts is getting the pond ready for Park and Recreational use. The face of the dam embankment on the water side was found to be in good condition. The concrete masonry slabs were well aligned and in good state of repair.

The spillway structure was found to be in satisfactory condition. The downstream end has been cleared of all logs, debris and miscellaneous junk reported previously.

An examination of the toe of the embankment indicated that even with no water in storage in the reservoir, the earth at the toe is wet and spongy. The brook in the vicinity of the dam toe was found to be flowing just about as much water as was noted when the reservoir was full



to spillway crest elevation. The majority of the water must therefore be side hill seepage and sub-surface seepage, not directly related to ponded water.

The surface of the embankment on the downstream side will be in need of attention. At the left side of the embankment the wash of surface water is causing the formation of a small gulley along a local foot path.

At the discharge end of the spillway, some masonry repairs will probably be needed in the near future.

Since the dam is, at present, under repair and service, it is recommended that no notice be sent to the Commonwealth at this time regarding the general comments herein. It is recommended that the comments be kept for record purposes and a determination of conditions at the dam be made in 1962. Anything found in need of repair at that time should then be reported to the Commonwealth of Massachusetts.

2. Middle Dam This dam was found to be in very good condition.
3. Lower Dam The embankment is becoming somewhat dilapidated but, since the pond formed is small and the dam not large, the structure is considered safe. The masonry spillway, as well as the related abutment masonry, were found to be OK.

J. Fortier Dam

This dam was in the same general condition as noted in previous years. The dam and pond are a borderline case. The dam is low in height and the pond small in volume. At present the structure does not come under County jurisdiction but if the dam should ever be raised to where storage capacity is increased to any extent, the structure would probably come under County control, since more than a million gallons of water could then be ponded. The dam is inspected annually to be certain that no major changes are made to the structure. When last inspected the dam and spillway were found to be in only fair condition but, persons and property downstream are not endangered by the dam.

K. Messer Dam

This dam is still breached and no water whatsoever is ponded. The dam was breached a number of years ago when the area was developed for housing construction. The old pond has been filled in, to a great

extent, and the unfilled area remaining has become a drainage ditch with the outlet thru the breach in the old earth dam embankment. Since the structure does not impound water and now is only related to a storm drainage system, it is the opinion of the undersigned that it no longer comes under County jurisdiction. However, since the breach might be plugged to form a small pond, the site is inspected annually to be certain the breach is maintained free and clear for the passage of storm flows.

L. Dwight Dam

The dam itself, the abutments and the canal spillway structure, as well as the canal headgate structure were all found to be in very good condition and well maintained. Normal flashboards were found in place on the dam.

M. Chicopee Electric Light Dept. Dam

As mentioned last year, this structure has been abandoned and a storm drainage system constructed. A final check of the area was made during this past year and, as now existing, in the opinion of the undersigned, the structure and facilities no longer come under County jurisdiction. No further inspections will be made.

N. Bemis Pond Dams

1. Upper Dam The embankment at this dam is in satisfactory condition for the present time. In a year or two it probably will need maintenance and grading repairs, as well as sod improvement work. The masonry main spillway and the two side spillways were found to be in satisfactory condition. It appears as if no water has been ponded at all during the past year by this dam.

With the construction of the new swimming pool facilities not too far distant from the dam, it is possible that this dam may not be used actively in the future. If this is so, and the dam remains in its present condition for another year or so, it will be recommended that the iron grills in each of the two side spillways be removed from the downstream ends of the side spillways to eliminate any possible blocking of the spillways and thus reduction in spillway flow capacity.

2. Lower Dam The embankment at this dam was found to be in very good condition. Repairs as recommended a year ago have been made in a satisfactory manner. Both the new and the old spillways were found

to be in excellent condition. No water was in storage in the pond at the time of the last inspection and it does not appear as if water was stored during 1961.

O. J. Stevens Arms Company Dam

This structure is in the same general condition as has been reported in recent years. The masonry wall of the dam was purposely breached a number of years ago to release the pond and to prevent the formation of any pond. The breach as existing at the time of the last inspection is wide enough and deep enough to pass storm flows.

P. Prosser Dam

1. Upper Dam This dam was found to be in the same general condition as reported a year ago. It is a low masonry structure and is not more than 18-inches above the bed of the brook. This structure ponds very little water since the volume upstream of the dam has been nearly completely filled in with materials washed down by storm flows. In spite of the lack of any maintenance and care of this structure, it was found to be in fairly good condition.
2. Lower Dam This dam is also in the same general condition as previously reported. The masonry is in fair condition and the breach that has existed under the spillway wall at the left side for a number of years still is present. It passes the normal flow of the brook under the masonry dam. No large pond is formed by the structure at any time and consequently the dam is not dangerous to persons and property downstream.

Q. Oxford Country Club Dams

1. Upper Dam This dam, breached in the flood of August 1955 has now been abandoned and an earth embankment with a large culvert has been constructed in its place. The purpose of the earth embankment is to carry a foot path across the small valley for use by golfers. There is no gate on the large culvert thru the embankment and thus brook flow passes the earth structure without causing any ponding. The structure will be inspected from time to time to be certain that no ponding is caused by the possible plugging of the culvert thru the embankment.
2. Lower Dam The embankment at this dam was found to be in satisfactory condition and very well turfed.

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& BOND CONSULTING ENGINEERS**

7.

The spillway still is in need of attention though it appears as if some maintenance work has been done during the past year. The foot bridge abutments are both undermined and it is possible that at some future date these abutments may settle and cause failure of the bridge. It would be a simple matter to provide proper supports and prevent any failure. The Owner should be advised to do this work. The earth embankment needs protection on each side of the spillway structure.

Respectfully submitted

A handwritten signature in dark ink, appearing to read "G. H. McDonnell", is written over a horizontal line.

George H. McDonnell  
County Hydraulic Engineer

GHM/cmb

*Roberts Pond*  
*C F*

Oct. 31, 1962

Birch Realty Trust  
255 Grattan Street  
Chicopee Falls, Mass.

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"There is some erosion taking place upon the surface of the dam at the right end and on the embankment face on the upstream portion of the dam. Surface drainage should be directed away from the dam and the condition corrected so there will be no further erosion taking place. The embankment needs brushing and a good growth of turf should be promoted thereon. It was noted that the gate in the drawoff pipe is part way open and the pond was down about 7 ft., more or less, from spillway elevation.

The spillway chute and channel were both OK for the time being but the masonry surface of the spillway structure needs a new coating of protective material to cover the eroded concrete. This should be done in the Spring."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours

BOARD OF COUNTY COMMISSIONERS

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C. F.

November 25, 1964

Birch Realty Trust  
255 Grattan Street  
Chicopee Falls, Massachusetts

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The embankment of this dam was found to be in good condition. The owner should cut brush growth in the Spring of 1965 and should fertilize, loam and seed the downstream face of the embankment, where needed, to promote a good growth of thick turf.

The spillway structure is in need of repair on the sloping wall just below the crest. A surface coating placed on this portion of the spillway has been eroded and should be replaced.

The pond should be drawn down for the Winter and Spring season. The gate at the dam should be left partially open until after the heavy Spring runoff. Spillway repairs as recommended hereinbefore should be made before the drawdown gate is closed in the Spring of 1965. All weeds and vegetation growing in the spillway approach channel should be cut down. On the day of inspection, water level in storage was about 6" below the crest of the dam."

The water in storage at this dam should be drawn down if the gate has not already been opened. The pond should be kept empty until after the heavy Spring runoff. The other repairs and maintenance work as recommended in

the report of the County Hydraulic Engineer should be completed before the pond is filled again for use in the Summer of 1965.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# ***TIGHE & BOND*** CONSULTING ENGINEERS

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HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

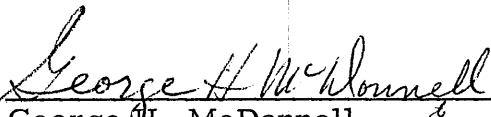
CD Chicopee  
February 12, 1965

The Hon. the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Gentlemen:

The undersigned has noted recently in the press that Roberts Pond Dam in Chicopee has apparently been sold by the Birch Realty Trust to Lieutenant Detective Chester A. Nowak of the Chicopee Police Department. A special inspection of this dam was made on Wednesday, February 10, 1965, to determine whether or not water was being ponded. The undersigned noted that water was being stored by the dam whereas it has been customary in past years to empty the pond in the late Fall and to keep it empty until after the heavy runoff in the Spring. Since the new owner may not be aware of the letter sent to the previous owner by your Board on November 25, 1964, I have prepared a communication on your stationery for your consideration. If you concur in the contents, the letter should be signed and forwarded. The original and one copy of the proposed communication to the new owner is enclosed herewith.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mb



December 7, 1966

Lieutenant Detective Chester A. Nowak  
Chicopee Police Department  
City Hall  
Chicopee, Massachusetts

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The embankment should be cleared of all brush and tree growth. The owner should develop a good growth of sod over the entire surface area of the embankment.

On the day of inspection, November 25th, the pond was found to be full to the crest of the spillway. The pond should be drawn down until after the Spring heavy runoff.

No flashboards were on the crest of the spillway. The drawdown gate was leaking a bit. Water was discharging from the outlet of the drawdown tube.

The spillway chute was satisfactory. The toe of the embankment was noted to be normal insofar as seepage is concerned."

It is essential that the embankment of this dam be maintained properly. The recommendation of the County Hydraulic Engineer should be followed at an early date, by the Spring of 1967 at the latest. All brush and tree growth should be cut from the embankment and a good growth of turf should be promoted.

Lieutenant Detective Chester A. Nowak 2.

December 7, 1966

As pointed out to you in a previous communication dated February 12, 1965, it has been the practice to empty the pond annually during the Fall of each year and to keep it empty until after the heavy Spring rains and surface runoff. The drawdown gate should be opened very slowly and the water released in a careful manner. Once the pond has been emptied, the gate should be opened wide and kept open until after the heavy Spring runoff.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# ***TIGHE & BOND***

***C O N S U L T I N G   E N G I N E E R S***

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BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

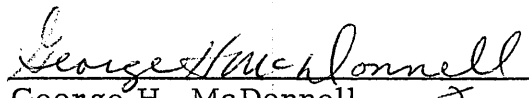
CD Chicopee  
March 9, 1967

The Honorable the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Gentlemen:

I recently received a telephone request from a Mr. Joseph Dragone of Springfield relative to information available on the Roberts Pond Dam in Chicopee. I have answered the request of Mr. Dragone and enclose herewith for your file, a copy of my communication. The contents are self-explanatory.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/mbf

Enclosure

CD Chicopee  
March 9, 1967

Mr. Joseph R. Dragone, Consultant  
77 Maple Street  
Springfield, Massachusetts

Dear Sir:

This will confirm my telephone conversation with you when you called relative to information on the Roberts Pond Dam in Chicopee.

The only records and information kept by the undersigned and the County Commissioners relates to the dam itself. Under the General Law of the Commonwealth of Massachusetts relative to dams, the County Commissioners cause inspections to be made of dams to determine their safety. The whole purpose of the Law is to be certain the dams are built and maintained in such a way that persons and property downstream are protected from a disaster should a dam fail.

The dam forming the pond is an earthen embankment somewhat over 150 feet in length and about 27 feet in height. The slopes of the embankment are about 3 to 1 on the upstream or pond side and 2 to 1 on the dry or downstream side. To the left of the dam embankment proper is a concrete spillway. There is a steel drain tube, encased in concrete, laid through the embankment.

Though the height of the dam is indicated on the records to be 27 feet, more or less, it is my opinion that the depth of the pond just upstream from the dam is probably no deeper than about 20 feet based upon spillway crest elevation.

The enclosed portion of a topographical sheet shows the body of water known as Roberts Pond. On the map it is called Mountain Lake. You will note that two brooks feed the lake. One brook extends to the north and its location is shown in the area of the words "radio tower". The main brook extends in a general northerly and thence easterly direction between North-South Highway and Westover Field.

You will note that two side brooks feed into the main brook. There is also a twin brook draining an area south of the pond and east of North-South Highway. I have circled the three brook systems supplying water to the pond in red. You will note that the main brook system drains a portion of Westover Field.

The last report made to the County Commissioners by the undersigned relative to the dam at Roberts Pond is dated December 1, 1966 and contains the following:

"The embankment should be cleared of all brush and tree growth. The owner should develop a good growth of sod over the entire surface area of the embankment.

On the day of inspection, November 25th, the pond was found to be full to the crest of the spillway. The pond should be drawn down until after the Spring heavy runoff.

No flashboards were on the crest of the spillway. The draw-down gate was leaking a bit. Water was discharging from the outlet of the drawdown tube.

The spillway chute was satisfactory. The toe of the embankment was noted to be normal insofar as seepage is concerned."

If I can be of any further assistance to you, please do not hesitate to call upon me.

Very truly yours,

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George H. McDonnell  
County Hydraulic Engineer

GHM/mbf

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND**

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HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD - Chicopee  
June 29, 1967

The Hon. the Board of County Commissioners  
52 State St.  
Springfield, Mass.

Re: Roberts Pond  
Willimansett

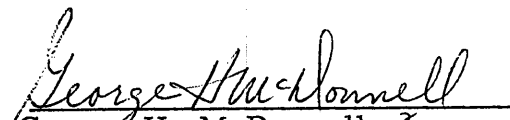
Gentlemen:

On Friday, June 23, 1967, the undersigned made an inspection of the above subject dam as a follow-up inspection per your letter of Dec. 7, 1966, to the owner of record. It was found that no clearing of brush and tree growth has been done on the surface of the embankment. Also, it was noted that to the right of the spillway chute, earth has been worn away, probably by foot traffic and water erosion, to a point where undermining of the spillway chute may occur. This area should be back-filled with compacted coarse gravel or broken stone.

A small stick caught near the bottom left of the spillway chute is causing water to be diverted during high rates of overflow in such a manner that it is being sprayed into the air, over the wall of the chute and this condition will aggravate earth erosion. The stick and any other debris should be removed.

It is recommended that the owner again be notified of the requirement to properly maintain the dam.

Very truly yours,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/f

July 3, 1967

Lieutenant Detective Chester A. Nowak  
Chicopee Police Department  
City Hall  
Chicopee, Massachusetts

Dear Sir:

In accordance with our records, you are listed as the owner of Roberts Pond Dam located in Chicopee, Mass., just upstream from the Willimansett section of the City.

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

" On Friday, June 23, 1967, the undersigned made an inspection of the above subject dam as a follow-up inspection per your letter of Dec. 7, 1966, to the owner of record. It was found that no clearing of brush and tree growth has been done on the surface of the embankment. Also it was noted that to the right of the spillway chute, earth has been worn away, probably by foot traffic and water erosion, to a point where undermining of the spillway chute may occur. This area should be backfilled with compacted coarse gravel or broken stone.

A small stick caught near the bottom left of the spillway chute is causing water to be diverted during high rates of overflow in such a manner that it is being sprayed into the air, over the wall of the chute and this condition will aggravate earth erosion. The stick and any other debris should be removed.

It is recommended that the owner again be notified of the requirement to properly maintain the dam."

July 3, 1967

2.

A letter dated Dec. 7, 1966, was sent to you and in that communication we recommended that all brush and tree growth should be cut from the embankment of the dam and a good growth of turf promoted by the Spring of this year at the latest. Based upon the inspection conducted by the County Hydraulic Engineer on Friday, June 23, 1967, none of this work has been accomplished.

This dam must be properly maintained. It impounds a sizeable amount of water just upstream from a heavily-populated portion of the Willimansett section of Chicopee. Lack of proper maintenance could result in endangering persons and property downstream.

Any further information concerning this matter which you may desire, will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# **TIGHE & BOND** CONSULTING ENGINEERS

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BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
November 6, 1967

The Honorable the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Gentlemen:

Re: Roberts Pond Dam  
Willimansett, Mass.

The undersigned made a special inspection of the above subject dam on Sunday afternoon, November 5, 1967, to determine whether or not the Owner had complied with the directive that maintenance be done on the downstream face of the dam and at the spillway chute.

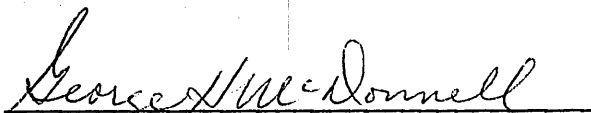
The undersigned found that the majority of the brush growth on the downstream face of the dam has been cut down and the entire downstream face is readily visible for inspection purposes.

An examination of the downstream face showed that the embankment is in fair condition but could be improved by placing loam and then seeding and fertilizing the loam on areas of the downstream slope where grass growth is thin or the slope is entirely bare. This work should be delayed until the Spring and the undersigned will make another inspection at that time and discuss this improvement with the Owner of the dam.

At the spillway chute, the Owner has backfilled the eroded areas alongside the chute and has greatly improved the toe or discharge end of the chute. Grouted riprap has been placed in such a manner that it now forms a well defined transition channel from the end of the concrete masonry chute to the bed of the brook proper. Backfill and grading in the general area of the discharge end of the chute and the grouted riprap has improved the downstream toe area of this facility considerably.

In the opinion of the undersigned, the Owner has done sufficient work so that the majority of the recommendations contained in the last letter-report have been complied with.

Very truly yours,



George H. McDonnell  
County Hydraulic Engineer

GHM/mbf

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

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HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
March 20, 1968

The Honorable the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Gentlemen:

Re: Roberts Pond Dam  
Willimansett, Mass.

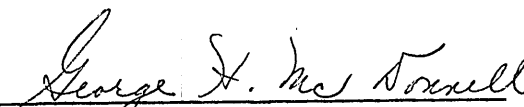
The undersigned made an inspection of the above subject dam in connection with the heavy rainfall of Sunday, March 17th and Monday, March 18th. It was found that the drawdown gate at the dam was open and the pond was empty. Conditions at the dam were satisfactory and the full flow of the storm runoff was passing through the conduit under the embankment, without ponding any sizeable amount of water.

It was noted that the wooden gatehouse structure is in a poor state of repair and that a new gate operating facility has been installed.

Examination of the gate shaft by use of a flashlight shows that the valve stem is not supported by the intermediate guide bracket attached to the wall of the concrete gate structure. It would appear that this bracket has either broken or the outer clamp portion has been removed or broken off. Consequently, when the gate has been operated at some time in the recent past, the shaft has become bent for lack of intermediate support.

Since the owner of the dam is undoubtedly aware of this condition and since closing of the gate to pond water will require that the gate operating shaft support be repaired or the shaft supported in some other manner, there seems to be no necessity of passing on a recommendation in connection with needed repairs to the owner. The dam will be checked from time to time during the spring rainy season.

Respectfully submitted,

  
George H. McDonnell  
County Hydraulic Engineer

GHM/amd

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

# *TIGHE & BOND*

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BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
March 20, 1968

The Honorable the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Re: Roberts Pond Dam  
Willimansett, Mass.

Gentlemen:

The undersigned made an inspection of the above subject dam in connection with the heavy rainfall of Sunday, March 17th and Monday, March 18th. It was found that the drawdown gate at the dam was open and the pond was empty. Conditions at the dam were satisfactory and the full flow of the storm runoff was passing through the conduit under the embankment, without ponding any sizeable amount of water.

It was noted that the wooden gatehouse structure is in a poor state of repair and that a new gate operating facility has been installed.

Examination of the gate shaft by use of a flashlight shows that the valve stem is not supported by the intermediate guide bracket attached to the wall of the concrete gate structure. It would appear that this bracket has either broken or the outer clamp portion has been removed or broken off. Consequently, when the gate has been operated at some time in the recent past, the shaft has become bent for lack of intermediate support.

Since the owner of the dam is undoubtedly aware of this condition and since closing of the gate to pond water will require that the gate operating shaft support be repaired or the shaft supported in some other manner, there seems to be no necessity of passing on a recommendation in connection with needed repairs to the owner. The dam will be checked from time to time during the spring rainy season.

Respectfully submitted,

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George H. McDonnell  
County Hydraulic Engineer

GHM/amd

GEORGE H. McDONNELL  
PHILIP W. SHERIDAN  
EDWARD J. BAYON

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CONSULTING ENGINEERS

BOWERS AND PEQUOT STREETS  
HOLYOKE, MASSACHUSETTS  
TEL. JEFFERSON 3-3991

CD Chicopee  
November 27, 1968

The Honorable the Board of County Commissioners  
52 State Street  
Springfield, Massachusetts

Gentlemen:

Inspections conducted throughout the year 1968 within the City of Chicopee have now resulted in all dams located in that City having been inspected at least once during the year. The following is a report on the general condition of the various dams situated within Chicopee.

A. Roberts Pond Dam

The downstream surface of the embankment should be properly maintained by removal of all brush and tree growth and the development of a good growth of sod. The sloping face should be properly graded, loamed and then fertilized and seeded to provide a thick, even turf cover. This work has been recommended in the past and though brush and tree growth have been cut from time to time, the downstream sloping surface of the embankment is still rough and sandy. The owner should be advised to improve the downstream surface of the embankment during the year 1969. The toe area of the embankment appeared to be satisfactory.

On the day of inspection the pond was found to be full to the crest of the spillway, and water was overflowing the spillway chute. No flashboards were on the crest of the spillway.

The drawdown gate was leaking a bit. Water was discharging from the outlet of the drawdown tube. An examination of the tube by use of a strong hand light indicated that the tube was in fair condition.

The concrete masonry of the spillway chute was noted to be o.k. At the bottom of the chute, the grouted riprap is satisfactory.

If the pond formed by the dam is not to be used during the winter and spring months, it would be advisable to lower the pond, as in the past years, and to keep the pond empty until after the heavy 1969 spring run-off season.

B. Hampden Brewing Company Dam

The pond formed by this dam and the dam itself are no longer in existence now that the local drainage system construction has been completed.

Since the old pond has been filled in and the dam eliminated by the drainage system, this structure should be dropped from County records.

C. City of Chicopee Dam

The right abutment at this dam and the block masonry forming the right abutment were found to be o.k. No leakage of any significance was observed. The concrete plug in the abutment wall showing on the downstream face is eroding a bit but the erosion is not deep as of the present time.

The crest of the dam was o.k. It has a very good, even grade and good alignment. No flashboards are maintained on the crest of the dam and water level was overflowing the crest on the day of inspection.

The toe area of the dam in the bed of Chicopee River was good. The basic ledge in the river bed, on which the dam has been built, appears solid and shows no sign of erosion.

The left abutment and the old abandoned canal gatehouse structure and the inlet facilities related thereto were noted to be safe.

D. Mass. Dept. of Natural Resources Dams

1. Upper Dam

The inspection of this dam was made in the presence of Mr.

Authier, supervisor of the park. The top of the embankment of this dam was found to be o.k. The concrete wall extending along the length of the top of the embankment is quite eroded and looks poor. However, its condition does not affect the safety of the dam.

Vegetation growing from the joints and cracks in the upstream concrete slab paving is being cleared and removed. The surface of the concrete slabs is on fairly good grade and there is only one area where there is minor evidence of settlement. This is in the vicinity of the gatehouse.

The right spillway sidewall masonry is cracked but o.k. The spillway crest was noted to be satisfactory. At the base of the central pier on the spillway, the concrete is spalled and eroded to a point where reinforcing is showing. This condition need not be corrected since this central pier does not have a bearing on the safety of the dam.

Downstream of the crest of the dam, various joints in the concrete floor should be filled with a mastic material. Joints at the foot-bridge pier are open and these should be filled.

The spillway sidewalls downstream of the spillway crest are eroded at the base. The condition is not as yet serious enough to require any repair work.

The water elevation in the dam embankment was observed by dunking the observation well just uphill from the toe of the embankment. Whereas the depth to water level at the time of the last inspection was 15-1/2 ft., the depth during the November inspection of this year was 17 ft. 7 in. Water surface in the Reservoir was lower than normal. Water was being drawn off.

An examination of the surface of the embankment slope shows that there is no erosion or wear needing attention. The toe area of the embankment does need brushing and removal of all small tree growth. The park supervisor agreed to take care of this maintenance work.

The seepage weir at the embankment toe was not functioning properly. Seepage water was passing under and around the weir. Consequently, the amount of water passing over the weir was not a true indication of the total seepage on the day of inspection.

The weir should be examined from time to time, measurements of flow taken on a monthly or semi-monthly basis, and a record kept of the flow. Whenever the weir is noted to be in need of attention, the required repairs should be made immediately.

In the opinion of the undersigned, the dam is safe and the necessary maintenance work includes clearing of brush and trees in the vicinity of the embankment toe and maintenance of the seepage weir, along with monthly or semi-monthly recorded seepage weir flows.

2. Middle Dam

This dam was inspected in the presence of park supervisor Authier. The crest of the dam was in good condition. No flashboards were on the crest. The earth embankment showed no evidence of erosion. The dam is quite wide for its low height.

The walls and floor of the spillway chute were in good condition. There is no stream bed erosion at the end of the chute.

In the opinion of the undersigned, this small dam was in satisfactory condition.

3. Lower Dam

This small granite block dam was found to be in good condition. Stoplogs were in place and were good. They appeared to be relatively new. Abutment areas were o.k. Water in storage was at the elevation of the top of the stop planks.

In the opinion of the undersigned, this dam is in very good condition.

As mentioned in the last report on this small dam, the height is less than 10 ft., the drainage area is only one-third of a square mile and the quantity of water stored is in the range of less than one-third million gallons. Consequently, the dam does not come under County jurisdiction in accordance with Chapter 253 of the General Laws and no further periodic inspections will be made of this structure.

E. Dwight Dam

This dam located across the Chicopee River in the center of Chicopee was found to be in satisfactory condition. It is a stone block dam. The crest has good grade and alignment. Flashboards on the crest are in poor condition, they are broken, and many are leaning forward. In all probability, they will be washed away in flood flows during the coming year. This condition does not affect the safety of the dam and, loss of the flashboards, is a normal and planned procedure during flood flows.

At the time of the inspection it would appear that the dam is no longer in active use insofar as power development is concerned. There appeared to be no flow thru the canal headworks.

The canal spillway was in satisfactory condition. Gate facilities on headworks were in fair condition.

The right abutment stone masonry and the natural ledge against which the right abutment has been built are all o.k.

At the time of inspection the water level in storage was just above the elevation of the permanent masonry crest of the dam.

In the opinion of the undersigned, the dam is safe.

F. Bemis Pond Dams

1. Upper Dam

Water is being ponded by this dam and water level in storage is about 4 feet higher than the water level in the lower pond. The condition of the embankment is fair. Turf cover is fair and there was no brush growth noted on the embankment.

The concrete of the main spillway structure was o.k. though some breaking and cracking was noted. Stoplogs were in the slots and water level in storage was at the crest of the upper stoplog.

Side emergency spillways were o.k. There was no debris in these spillways nor was there any debris in the main spillway.



The bar racks formerly in the side spillways no longer exist. They were removed based upon safety recommendations.

The footbridge over the right auxiliary spillway has been removed and the one at the left auxiliary spillway is rotting and deteriorating.

The toe area of the central portion of the embankment is flooded by water backed up from the pond below and consequently, the toe could not be examined. The exposed portions of the toe at both ends of the dam were o.k. and dry.

In the opinion of the undersigned, the dam is safe.

2. Lower Dam

The bar rack at the shaft spillway inlet is plugged with debris. This material should be removed so that the spillway shaft can function properly and water level controlled to the correct elevation in the pond. On the slope of the embankment towards the pond and in the general vicinity of the spillway shaft, there are a number of tree stumps which should have the root structure killed or the stumps dug out.

The spillway at the right end of the dam and the concrete of the spillway chute below the spillway crest is becoming badly worn and eroded. Maintenance work should be done at these locations. The floor of the spillway chute is becoming quite poor.

The rock fill at the toe of the dam was in satisfactory condition. There were no flashboards on the spillway crest.

All brush growth occurring on the downstream face of the dam should be cleared, particularly from the area of the spillway chute. Weed growth on the downstream face of the embankment is quite thick and maintenance work should be done to eliminate this growth and develop a good turf cover. The weed growth on the downstream face is so thick that a proper inspection of the surface of the embankment cannot be made.

The owner should be advised to properly maintain the dam.

G. Oxford Country Club Dam

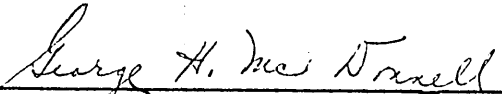
This small dam is in relatively poor condition. Concrete at the right side of the spillway is cracked, broken and settled. The wooden plank portion of the structure is in fair condition. No flashboards are on the crest. Water level in storage was noted to be overflowing the crest.

Abutments of the footbridge passing over the spillway of the dam are undermined and shifting. On the whole, the spillway portion of the dam is quite dilapidated.

The earth embankment sections are in fair condition. They are hard and they are wide in relation to their low height. This dam would not come under County jurisdiction except for the fact that the drainage area is more than one square mile. Any sudden loss of the dam by failure of the spillway or breach of the embankment would do little or no property damage except to golf course property of the owner which lies between the dam location and the Chicopee River. However, a sudden loss might be dangerous to the safety of persons on the golf course immediately below the small dam.

It is recommended that the owner be advised of the deteriorating and dilapidated condition of the dam, particularly the masonry and footbridge abutments.

Respectfully submitted,

  
\_\_\_\_\_  
George H. McDonnell  
County Hydraulic Engineer

GHM/amd



Commonwealth of Massachusetts

COPY

# County of Hampden

Springfield, Mass.

Office of the  
County Commissioners  
52 State Street

William F. Stapleton  
Chairman

Ralph P. Walsh  
Floyd M. Fradet

December 4, 1968

Mt. Lake Resort  
301 Irene Street  
Fairview, Massachusetts

Attn: Mr. Chester A. Nowak

Gentlemen:

In accordance with the provisions of Chapter 253, Section 45, et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam, located in Willimansett on the pond formerly known as Roberts Pond, has been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him.

"The downstream surface of the embankment should be properly maintained by removal of all brush and tree growth and the development of a good growth of sod. The sloping face should be properly graded, loamed and then fertilized and seeded to provide a thick, even turf cover. This work has been recommended in the past and though brush and tree growth have been cut from time to time, the downstream sloping surface of the embankment is still rough and sandy. The owner should be advised to improve the downstream surface of the embankment during the year 1969. The toe area of the embankment appeared to be satisfactory.

On the day of inspection the pond was found to be full to the crest of the spillway, and water was overflowing the spillway chute. No flashboards were on the crest of the spillway.

The drawdown gate was leaking a bit. Water was discharging from the outlet of the drawdown tube. An examination of the tube by use of a strong hand light indicated that the tube was in fair condition.

COPY

The concrete masonry of the spillway chute was noted to be o.k. At the bottom of the chute, the grouted riprap is satisfactory.

If the pond formed by the dam is not to be used during the winter and spring months, it would be advisable to lower the pond, as in the past years, and to keep the pond empty until after the heavy 1969 spring run-off season."

In order to properly maintain and protect the dam, the embankment portion should be covered with a good growth of turf. To accomplish this the surface should be cleared of all brush and weeds, covered with loam and then the area seeded and fertilized. This work should be done in 1969.

If you do not plan to make any particular use of the pond during the winter months, it would be advisable to empty the pond for protection of the dam during possible extreme spring run-off conditions.

Any further information concerning this matter which you may desire, will be furnished by this office upon request.

Very truly yours,

BOARD OF COUNTY COMMISSIONERS

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Slate Dam



o Chicopee

Also see: Dam Report Section - Chicopee. See also: County Highways - "Fish Pond Dam" - ch07090.

City/Town                      Chicopee

Dam                              Slate Dam

CHICOPEE  
D05029

SLATE DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

South Pond Dam



o Chicopee

Also see: Dam Report Section - Chicopee.

City/Town	Chicopee
Dam	South Pond Dam
Water	South Pond

CHICOPEE  
D05030

SOUTH POND DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)



United States Rubber Company Dam



1957 Chicopee

Ash Storage Silo in the Chicopee River. See also: County Roads Plan #10 (1945) "Dam in Chicopee Falls for U S Rubber Co (Uniroyal)".

City/Town Chicopee

Dam	United States Rubber Company Dam
Name	U.S. Army Engineer Division, New England - Corps of Engineers
Name	United States Rubber Company
Water	Chicopee River

*Recd August 12, 1957*

6 August 1957

NEDOW

United States Rubber Company  
Chicopee Falls  
Massachusetts

ATTENTION: Mr. R. W. Farwell

Gentlemen:

Thank you for your letter of 24 July 1957 inclosing sketch showing a proposed foundation for an ash storage silo in the Chicopee River.

The proposed construction will not affect commercial navigation or any authorized Federal flood control project. Consequently, no Federal permit is required.

It appears from your sketch that there will be nine piers in the river extending above the pile cap. These piers will constitute an obstruction to flood flows raising backwater levels upstream. It is almost certain that a considerable amount of debris which will further obstruct the channel and increase flood stages will be collected on the piers. In view of the serious problems at the U. S. Rubber Company and Chicopee Manufacturing Company at this location in past floods, such construction is considered extremely inadvisable at this time.

Subsequent to the floods of August 1955 the Federal Government removed debris and sediment from this reach of the river in an attempt to restore the channel and reduce damages from any future flooding. No permanent work was authorized or undertaken at that time.

To provide permanent flood protection in this area the government is constructing the upstream Barre Falls flood control reservoir. In addition, consideration will be given to other upstream reservoirs and to local protection in the reach downstream of the Deady Memorial Bridge. In this connection, it appears that the proposed construction may affect the possibility of a flood wall at the U.S. Rubber Company.

United States Rubber Company

6 August 1957

Your proposal will not affect an alternative plan for local flood protection involving the diversion of the river away from the ash silo site. However, this alternative involves several serious problems and may not be feasible. In either case the effect of the proposed construction on flood stages for the next few years would be a serious factor affecting flood damages in your plant.

Although no Federal permit is required, it is understood that a permit will be required from the Waterways Division of the Massachusetts Department of Public Works, whose address is 100 Nanhua Street, Boston, Massachusetts. Copies of this correspondence are being forwarded to the City Engineer of Chicopee, the Hampden County Board of County Commissioners and the Waterways Division for their information.

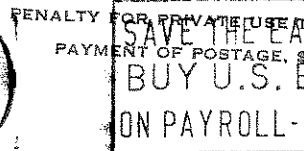
Very truly yours,

MILTON L. WACHENDORF  
Lt. Colonel, Corps of Engineers  
Assistant Division Engineer  
for Civil Works

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND  
CORPS OF ENGINEERS  
150 CAUSEWAY STREET  
BOSTON 14, MASSACHUSETTS  

---

OFFICIAL BUSINESS



*Received  
Aug. 12 - 1957*

Board of County Commissioners  
Hampden County Court House  
Springfield, Mass.

# Yoerg Tire & Rubber Co.

8-0-4 GARAGE

158 Chestnut St., Holyoke, Mass., 192

Name

Address

Sold by	Cash	Paid Out	charge	AMOUNT
WASH				
POLISH				
STORAGE				
GAS		GALS.		
OIL		QTS.		
TIRES				
TUBES				
VULCANIZING				
SUPPLIES				

Rec'd by

**PRESERVE THIS SLIP**  
O. E. Dupont Printing Co.

Nº 242

Veterans of Foreign Wars Dam



o Chicopee

Also see: Dam Report Section - Chicopee.

City/Town	Chicopee
Dam	Veterans of Foreign Wars Dam
Name	Veterans of Foreign Wars

CHICOPEE  
D05032

VETERANS OF FOREIGN WARS DAM

NO IMAGE ON FILE FOR THIS RECORD

(INFORMATION EXISTS ONLY ON A FILE CARD FROM THE  
OFFICE OF THE FORMER HAMPDEN COUNTY ENGINEER.)

Wyszatycki Dam



1926 Chicopee

Located easterly of Montgomery Street on Crowfoot Brook.

City/Town	Chicopee
Dam	Wyszatycki Dam
Name	Wyszatycki, Lucia
Streets	Montgomery Street
Water	Crowfoot Brook



March 10, 1926

Mr. John Wyszatycki,  
Montgomery Street,  
Willimansett, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 334 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your ice pond dam, located near the old ice house on the headwaters of Crowfoot Brook so-called in that part of the City of Chicopee known as Willimansett, has been inspected by our engineer and your attention is called to the following recommendations made by him;

"It is recommended that the spillway be increased, the dam strengthened along its downstream toe, and that the top of the structure be raised at least two and one-half feet above the crest of the spillway."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable time.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_

\_\_\_\_\_

Page 16 of report

John Wyszgatycki,  
Montgomery St.  
Willimansett, Mass.

you are notified that your ice pond dam, located near the old ice house on the headwaters of Crowfoot Brook so called in that part of the City of Chicago known as Willimansett, etc,

"It is recommended that the spillway be increased, the dam strengthened along its downstream toe, and that the top of the structure be raised at least two and one-half feet above the crest of the spillway."

Now, therefore, etc.

May 30, 1933

Mr. John Wyszatycki,  
Montgomery Street,  
Willimansett, Mass.

Dear Sir:

In accordance with the provisions of Section 45 of Chapter 253 of the General Laws as amended by Chapter 234 of the Acts of 1923 and as further amended by Chapter 178 of the Acts of 1924 relative to the inspection, condition and safety of the dams of Hampden County, you are notified that your two dams, located on Crowfoot Brook in the City of Chicopee, have been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

North Dam - "There was some excavation made in the embankment at the north end of this dam. This excavation should be re-filled and the overflow channel cleaned and repaired."

South Dam - "There is a ditch running part way through the embankment at the north end of this dam. This ditch should be filled and leveled up to the height of the top of the dam."

Now, therefore, in accordance with Section 46 of said Chapter 253, it is ordered that the above recommendations be complied with in a reasonable length of time.

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman.

\_\_\_\_\_  
\_\_\_\_\_

October 3, 1945

Mr. Leo Wyszatycki  
Montgomery Street  
Willimansett, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam on Crowfoot Brook in Chicopee has been inspected by our engineer and your attention is called to the following conditions noted and recommendations made by him;

"The cobble stone etc. dumped into the emergency swale overflow of this structure, should be removed and the swale returned to its original efficiency."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,

COUNTY COMMISSIONERS

By \_\_\_\_\_ Chairman

\_\_\_\_\_  
\_\_\_\_\_

December 8, 1947

Mrs. Lucia Wyszatycki  
744 Montgomery Street  
Chicopee Falls, Mass.

Dear Madam:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that the two dams on Crowfoot Brook near the corner of Montgomery Street and Granby Road, owned by you, have been inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"In a recent inspection made of the two Wyszatycki dams located on Crowfoot Brook near the corner of Montgomery Street and Granby Road in Chicopee, it was found that there was concentrated leakage along the downstream toe of the southerly dam which should be plugged up by filling in on the pond side of the dam with gravel.

The trees growing on the downstream side of the dam should be cut down.

Stop-planks have been installed in the spillway structure of the north dam which have raised the water level to within a few inches of the top of the dams. Stop-planks should be removed so that the level of the pond will be dropped six inches. After the cutting of ice has been completed, the pond should be dropped an additional six inches to care for heavy spring, summer and fall run-off."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Yours very truly,  
COUNTY COMMISSIONERS

By Charles W. Bray

Chairman

William Dwight

Thomas F. Sullivan

October 24, 1950

Mr. Edward Wyszatycki  
287 Maple Street  
Holyoke, Mass.

Dear Sir:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your two dams, located easterly and adjacent to Montgomery Street in Willimansett, have been recently inspected by our Engineer and your attention is called to the following conditions noted and recommendations made by him:

"Brush and tree growth on both dams should be removed."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman  
\_\_\_\_\_  
\_\_\_\_\_

Commissioners signed this letter on October 25, 1950.

Eugene Bertrand  
49 Roseland St  
Springfield  
Hampden County Commissioner?

Dear Sir,

Having purchased  
an ice pond formerly owned  
by John Wyszatyski on Montgomery  
Street Chicopee Falls, I wish to  
secure a permit to raise the  
dam of the pond, so that there  
may be more water on which  
to cut ice.

Hoping that you  
will grant my request, I remain,

yours Truly  
Eugene Bertrand

James L. Tighe Consulting Eng  
189 High St. Holyoke Mass

Permission to repair the John  
Wysatychi dam on Prospect  
Brook Montgomery St. Hillmanett  
see page 16 of report. It is the  
same dam that was ordered  
closed down since 2 years ago

Rec'd August 15, 1952

Post Office Department  
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, \$300  
(GPO)

POSTMARK OF DELIVERING OFFICE

HOLYOKE  
AUG 14  
7 PM  
1952

Return to County Commissioner  
(NAME OF RECIPIENT)

Street and Number,  
or Post Office Box, County House

REGISTERED ARTICLE

No. 2070 INSURED PARCEL

No. \_\_\_\_\_

**SPRINGFIELD,**  
MASSACHUSETTS.



November 17, 1954

7

Miss Lucia Wyszatycki  
c/o Mrs. Morgan  
691 Carew Street  
Springfield, Mass.

Dear Madam:

In accordance with the provisions of Chapter 253, Section 45 et seq. of the General Laws, Tercentenary Edition, relative to the inspection, condition and safety of the dams of Hampden County, you are hereby advised that your dam located easterly of Montgomery Street in Chicopee, has been recently inspected by our Engineer, and your attention is called to the following conditions noted and recommendations made by him:

"Broken chunks of concrete are lodged in the spillway overflow well and they should be removed. These pieces of concrete partially block the passage of the overflowing water and could result in further blocking of the spillway and an overflowing of the dam during high run-off."

Any further information concerning this matter which you may desire will be furnished by this office upon request.

Very truly yours,

COUNTY COMMISSIONERS

By \_\_\_\_\_  
Chairman

\_\_\_\_\_  
\_\_\_\_\_

Cooley Brook Watershed - 1914



1914 Chicopee

"Plans of Cooley Brook Watershed - Chicopee, Mass. - 1914". Locations & descriptions of lands taken for Chicopee Water Department in the City of Chicopee & Town of Ludlow. See file in Reports Section for complete indexing (D25069)  
See also: County Highways - "Cooley Brook Impounding Dam & Reservoir" - ch16027. See also: County Roads Plan #4 (1913) "Earth Dam - Cooley Brook Reservoir".

City/Town	Ludlow
City/Town	Chicopee
Water	Cooley Brook Watershed



PLANS  
OF  
COOLEY BROOK WATERSHED

CHICOPEE, MASS.

1914



Abbey	C. C.	Page 14 <sup>93</sup>
Atkins	Seymour D. Estate	" 23 <sup>14</sup>
Augustunowic	Wasil	" 21
Bell	Hiram W.	" 16
Britton	Royal Heirs	" 8
Burnett	Goodman A.	" 15
"	Henry	" 5-17
Cadwell & Cowles		" 27
Despres	Angeline	" 36
Dostal Bros		" 35
Granfield & Loomis		" 18
Hamilton	Mary J.	" 1-13
Hammond		" 6
Kane	Patrick	" 32
Lawton		" 22
Lerne	Joseph	" 12
Locke	Mary A.	" 24
Lobodyez	Michael	" 30
Loomis & Granfield		" 18
Mason	Rollin S.	" 34
Miller	Ed. P.	" 37
Munsing	Henry A.	" 19-31
Murphy	James	" 2
Paine	William	" 3
Parsons	P. E.	" 10
Peret		" 20
Rudiger	Jules	" 29
Rumrill	J. Melville	" 9
Simonds	J. Leroy	" 38
Stider	George F.	" 7
Szczepanski	Joseph	" 4
Tilley	Otis E.	" 33
Unknown		" 11-25-26-28

*See plan on last page showing whole taking*



LOCATIONS AND DESCRIPTIONS  
OF  
LANDS TAKEN  
FOR  
**CHICOPEE WATER DEPARTMENT**  
IN THE  
CITY OF CHICOPEE AND TOWN OF LUDLOW

*The purpose for which these lands are taken is to protect and preserve the purity of the water supply of the City of Chicopee, Massachusetts.*

CITY OF CHICOPEE  
BOARD  
OF  
WATER COMMISSIONERS

*George H. Fugere*

Chairman.

*Francis Hudson*

*James J. Taylor*

*Filed and recorded in the Hampden Registry of Deeds  
August 1914 as required by Section 2 Chapter 499 of  
the Acts of Legislature of Massachusetts for the year 1908.*

11986

RECEIVED AND RECORDED

AUG 12 1914

AT 3:00 P.M. P.M.

THOMAS A. McDONALD

City Solicitor

HARRY R. ELDER

Special Counsel

COBB, BEESLEY & MILES

Engineers



VAS. MURPHY.

N. 35° 14' W.  
405.0 F.

530.0 F.

SB

580.0 F.  
N. 41° 26' E. ±

CITY OF CHICOPEE.

AREA 2.54 ACRES ±.

MARY J. HAMILTON.

N. 41° 11' E. ±  
240.0 F.

N. 67° 59' E.  
250.0 F.

PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**MARY J. HAMILTON.**

SCALE: 1 IN. = 100 FT.      JUNE, 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Parcel #1

Mary J: Hamilton to City of Chicopee.

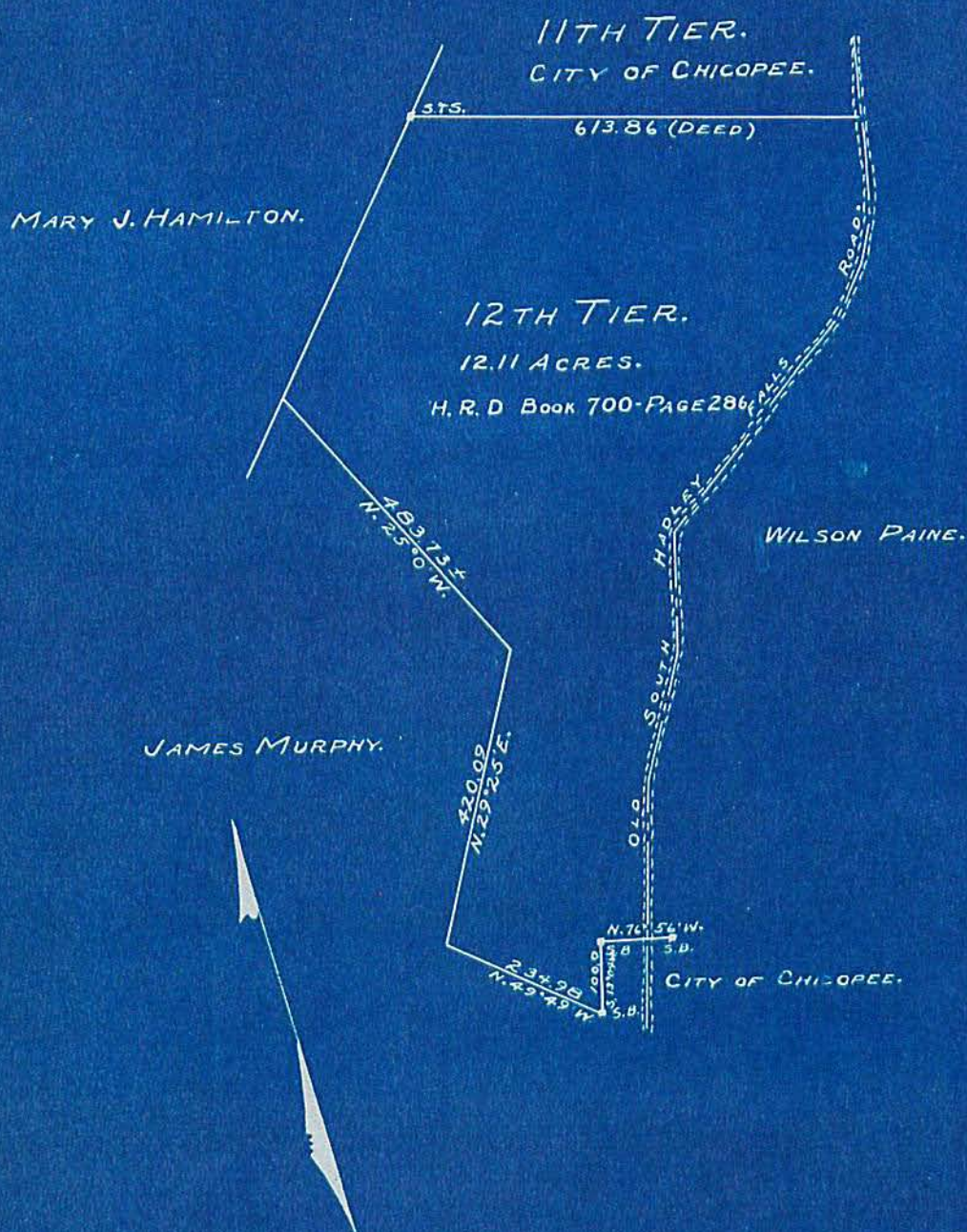
Beginning at a stone bound at the South West corner of the land belonging to the City of Chicopee, being also the North West corner of land of James Murphy; being also on the Northerly line of tier No.12; thence running South Westerly along land of said James Murphy; thence running North  $35^{\circ} 14'$  West, about 405.0 feet to a point; thence Easterly about 530.0 feet to the point of beginning.

Parcel #2

Beginning at a point on the Northerly line of land owned by the City of Chicopee, said point being about 580.0 feet North Easterly from a stone bound at the North Westerly corner of land owned by James Murphy; thence North  $12^{\circ} 17'$  East, about 240.0 feet to a point; thence North  $67^{\circ} 59'$  East, about 250.0 feet to land of the City of Chicopee; thence South Westerly by land of said City to the point of beginning.

The amount of land contained in parcels one and two is 2.54 acres, more or less.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**JAMES MURPHY,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 FT.

JUNE, 1914.

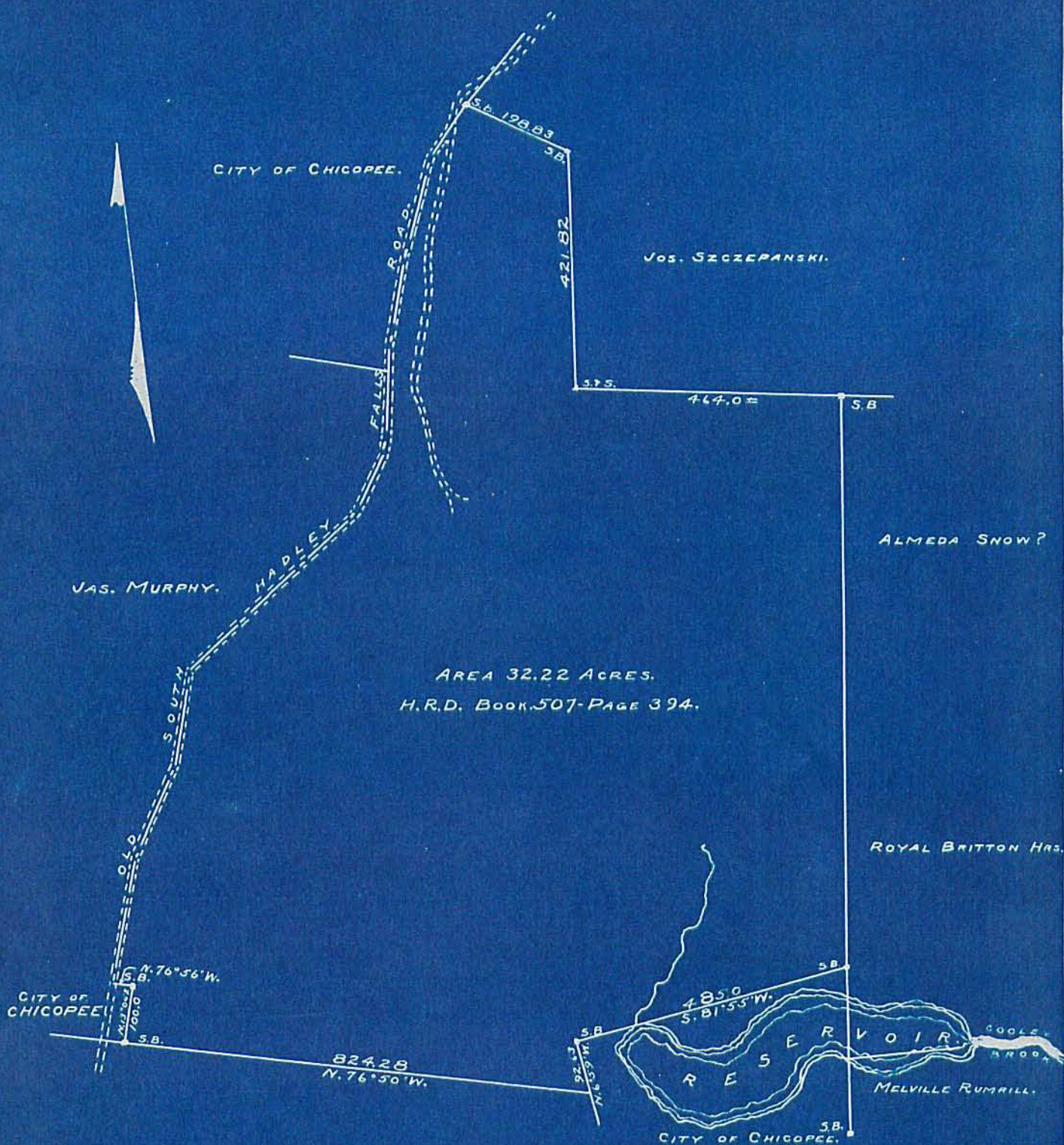
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



James Murphy to City of Chicopee.

Beginning at a stake and stone, said point being on the North line of tier No.12 at the South West corner of land of City of Chicopee; thence running East of it along the Southerly bound of the City of Chicopee, 613.86 feet to the center of the old South Hadley Falls Road; thence Southerly along said center of said road to other land of City of Chicopee, known as the Morton Brook Reservoir Lot; thence North Westerly to the North West corner of said lot; thence South  $13^{\circ} 4'$  West, 100.0 feet to a stone bound; thence North  $49^{\circ} 49'$  West, 234.98 feet to a point; thence North  $29^{\circ} 25'$  East, 420.09 feet to a point; thence North  $25^{\circ}$  no minutes West, about 483.73 feet to land of Mary J. Hamilton: The last three courses are on land of grantor; thence North Easterly to the point of beginning, containing 12.11 acres, being a portion of land conveyed by Lucien D. Lyon to James Murphy, H.R.D., book 700, page 286.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

**WILSON PAINE,**  
CHICOPEE, MASS.

SCALE: - 1 in. = 200 ft. JUNE - 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Wilson Paine to City of Chicopee.

Beginning at stone bound, said point being the North Easterly corner of land owned by City of Chicopee, known as the Cooley Brook Reservoir Lot; thence running South  $81^{\circ} 55'$  West, 485.0 feet to a stone bound, said point being the North West corner of said reservoir lot; thence South  $6^{\circ} 59'$  East, 92.63 feet to a point; thence North  $76^{\circ} 50'$  West, 824.28 feet to a stone bound, said point being the South East corner of land owned by the City of Chicopee, known as the Morton Brook Reservoir; thence North  $13^{\circ} 4'$  East, 100.0 feet to a stone bound, said point being the North Easterly corner of Morton Brook Reservoir lot; thence North  $76^{\circ} 56'$  West to the center of Old South Hadley Falls Road, so called; thence North Easterly along center of said road to a stone bound at land of Joseph Szczepanski, formerly of one Godek; thence South Easterly 198.83 feet to a stone bound; thence Southerly 421.82 feet to a stake and stone; thence Easterly about 464.0 feet to a stone bound at land supposed to be owned by Almeda Snow. the last three courses being along land of said Joseph Szczepanski; thence Southerly along land of Almeda Snow and Royal Britton heirs to place of beginning, containing 32.22 acres and being land described in deed of Harriet A. Fuller to Wilson Paine, H.R.D., book 507, page 934.







Joseph Szczepanski to City of Chicopee.

Beginning at a stone bound on the old South Hadley Road at land of Wilson Paine and City of Chicopee; thence running North Easterly along land of said City of Chicopee, 383.46 feet to land of Henry Burnett; thence South Easterly along said Burnett 930.60 feet to stone bound at land supposed to be of George F. Stider; thence South Westerly 250.80 feet to a stone bound at land supposed to be of Almeda Snow; thence North Westerly 594.0 feet along land of said Snow and Wilson Paine to stake and stone; thence Northerly 421.82 feet to a stone bound; thence North Westerly 198.83 feet to the point of beginning. The last three courses being along land owned by Wilson Paine, containing 9.53 acres, being a portion of land conveyed from one Godek to Joseph Szczepanski, H.R.D., book 878, page 468.



CITY OF CHICOPEE.

793.98

S.B.

VOS. SZCZEPANSKI.

932.58

DISTANCES TAKEN FROM DEED. H.R.D. 478-472

AREA 17.21 ACRES ±.

932.58 (DEED) S. 41° 52' E.  
951.58 MEASURED.

FRANK LUSNIA.

S.B.

793.98

S.B.

GEO. F. STIDER.

PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**HENRY A. BURNETT,**  
CHICOPEE, MASS.

SCALE: 1 IN. = 100 FT.

JUNE, 1914.

COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Henry Burnett to City of Chicopee.

Beginning at a stone bound said point being the North East corner of land herein conveyed, also the North West corner of land of Frank Lusnia; thence running South Easterly along land of said Lusnia, 951.58 feet to a stake and stone at land supposed to be of George F. Stider; thence South Westerly 793.98 feet to a stone bound at land of Joseph Szczepanski; thence North Westerly along land of said Joseph Szczepanski, 932.58 feet to land of City of Chicopee; thence North Easterly along land of said City of Chicopee, 793.98 feet to point of beginning, containing about 17.21 acres, being land conveyed from Locero J. Gibbs to Henry A. Burnett. H.R.D., book 478, page 472.



UNKNOWN.

N. 76° 46' E.  
99127

N. 83° 15' E.  
55133

JOS. SZCZEPANSKI.

398 ACRES.

FRANK LUSNIA.

660.0 (DEED.)

CITY OF CHICOPEE.

2086

STIS.

PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**HAMMOND,**

SCALE: 1 IN. = 80 FT.

COBB, BEESLEY & CO. MILES, CIV. ENGRS. SPRINGFIELD, MASS.

JUNE, 1914.



Hammond to City of Chicopee.

Beginning at a stake and stone marking the North West corner of land owned by the City of Chicopee, formerly the Carver lot, and running thence North Easterly about 98.0 feet to a point; thence running North  $76^{\circ} 46'$  East, 991.27 feet to land of Joseph Szczepanski; thence South  $31^{\circ} 33'$  West by land of said Szczepanski, 143.91 feet to a point; thence running South Westerly by land of said Szczepanski and Frank Lusnia to the North Easterly corner of land of said City of Chicopee; thence Westerly by land of said City of Chicopee, 660.0 feet to point of beginning. Containing about 3.98 acres of land.



JOS. SZCZEPANSKI.

HENRY BURNETT.

N. 42° E.

FRANK LUGNIA.

14.52 ACRES.

PLOTTED FROM DEED. H. R. D. 794-495.

239.18

S. 6° W.

UNKNOWN.

361.68  
S. 84° E.

PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**GEO. F. STIDER,**  
WINSTEAD, CONN.

SCALE: - 1 in. = 100 ft.

JUNE, 1914.

COBB, BEESLEY & MILES, CIV. ENG'RS.

SPRINGFIELD, MASS.



George F. Stider to City of Chicopee.

Beginning at the North West corner of land of F. E. Parsons; running thence North  $84^{\circ}$  West, 62 rods and 20 links, by land formerly of Brigham Day, now thought to be of one Almeda Snow, thence North  $42^{\circ}$  East by land of Joseph Szczepanski, Henry Burnett and Frank Lusnia, to a point; thence South  $84^{\circ}$  East, 21 rods, 23 links (361.68 feet) by land formerly of said Day; thence South  $6^{\circ}$  West, 56 rods, 23 links (939.18 feet) by land formerly owned by L. Keith and Churchill Snow, to point of beginning. Containing about 14.52 acres, and being land sold to G. & M. Stider from J. Beaulieu, H.R.D., book 794, page 495.







Royal Britton Heirs to City of Chicopee.

Being the Southerly part of a tract of land conveyed to Brigham Day by John J. Crandall and his wife Abigail L. Crandall, commencing on the Southerly line of said tract near the brook and extending Northerly the whole width of said BrighamDay's lot, so far as to enclose 15 acres, bounded Easterly on land now, or formerly occupied by one Snow, 27 rods. Westerly on the Burt lot, so called, 34 rods; South on land now, or formerly, of one Caulkins, 85 rods; and Northerly on land of said Day, 74 rods. Said premises conveyed to Albert Morton by deed H.R.D., book 205, page 361.

This description being taken from deed conveyed to Royal Britton by Clarence H. & Henry W. Morton, H.R.D., book 386, page 512.



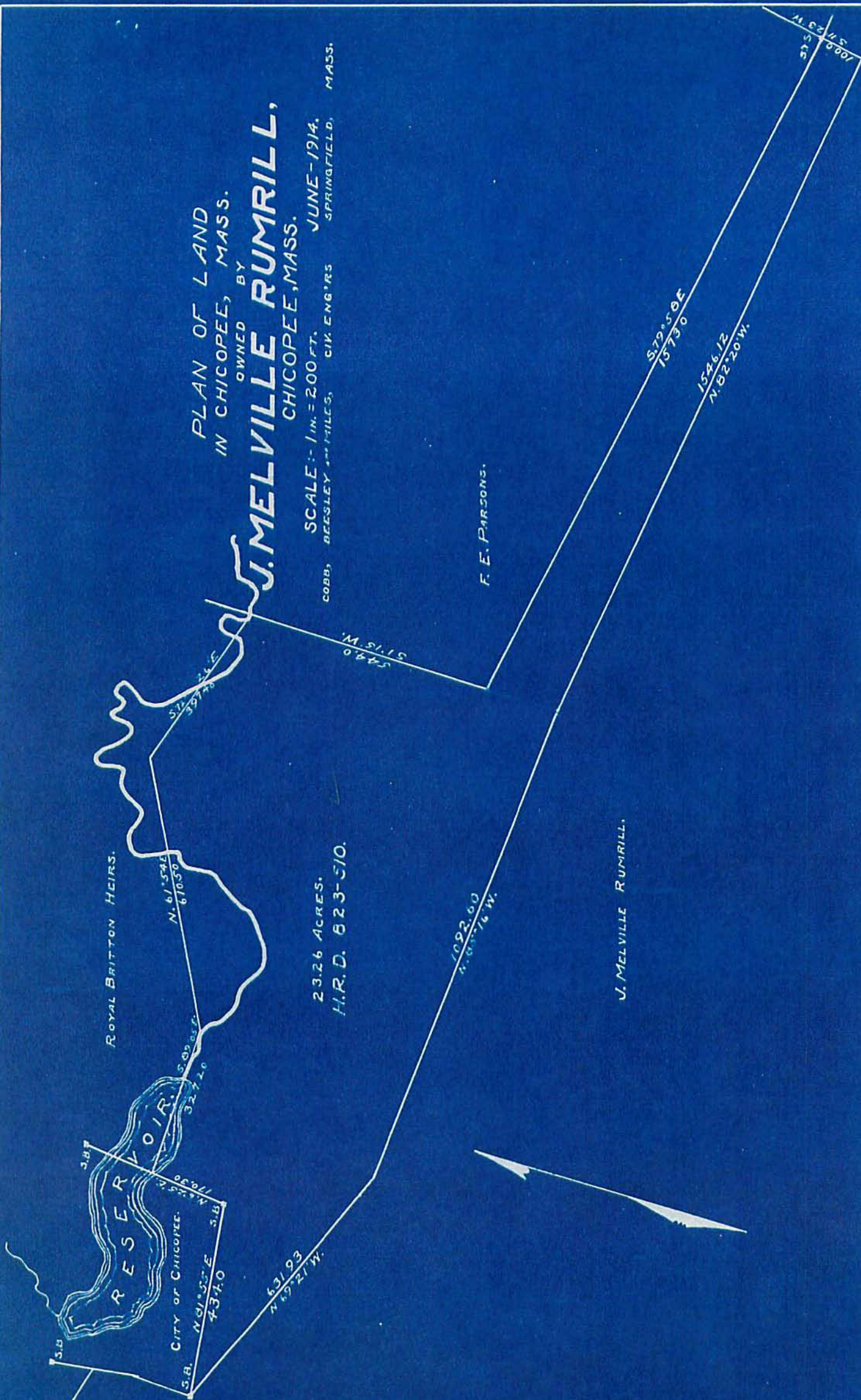
PLAN OF L AND  
IN CHICOPEE, MASS.  
OWNED BY  
**VILLE RUMRILL,**  
CHICOPEE, MASS.

COBB, BEESLEY 300 MILES, CIV. ENG'RS  
SCALE:- 1 IN. = 200 FT.  
JUNE-1914.  
SPRINGFIELD, MASS.

23.26 ACRES.  
H.R.D. 823-510.

F. E. PARSONS.

J. MELVILLE RUMRILL.

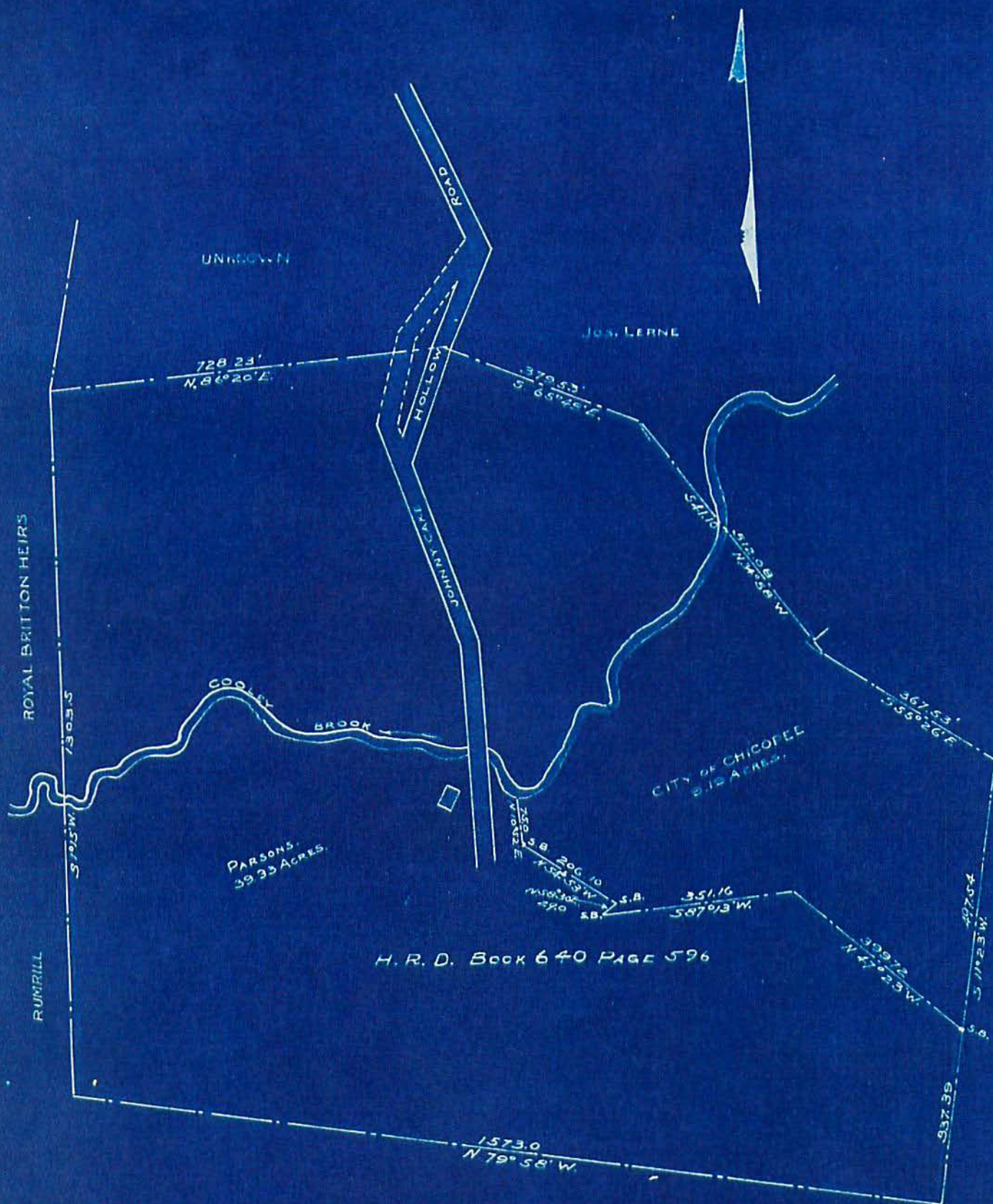




J. Melville Rumrill, et al, to City of Chicopee.  
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Beginning at a stone bound said point being the South West corner of land owned by the City of Chicopee, known as the Cooley Brook Reservoir Lot; thence running North  $81^{\circ} 55'$  East, 434.0 feet to a stone bound, said point being the South Easterly corner of said reservoir lot; thence North  $6^{\circ} 25'$  East, 170.30 feet to the land of Royal Britton heirs; thence South  $89^{\circ} 5'$  East, 327.20 feet; thence North  $61^{\circ} 54'$  East, 610.50 feet; thence South  $72^{\circ} 26'$  East, 397.48 feet to land of F. E. Parsons. The last three courses being along land owned by Royal Britton heirs; thence South  $1^{\circ} 15'$  West, 544.0 feet to a stake and stone; thence South  $79^{\circ} 58'$  East, 1573.0 feet to a stake and stone to land of Mary J. Hamilton. The last two courses being along land of F. E. Parsons; thence South  $11^{\circ} 23'$  West, 100.0 feet; thence North  $82^{\circ} 20'$  West, 1546.12 feet; thence North  $85^{\circ} 16'$  West, 1092.60 feet, thence North  $69^{\circ} 21'$  West, 631.93 feet to the point of beginning. The last four courses being along land owned by J. Melville Rumrill, et al, containing 23.26 acres, being a portion of land conveyed from one Fuller to J. Melville Rumrill, et al, H.R.D., book 823, page 510.





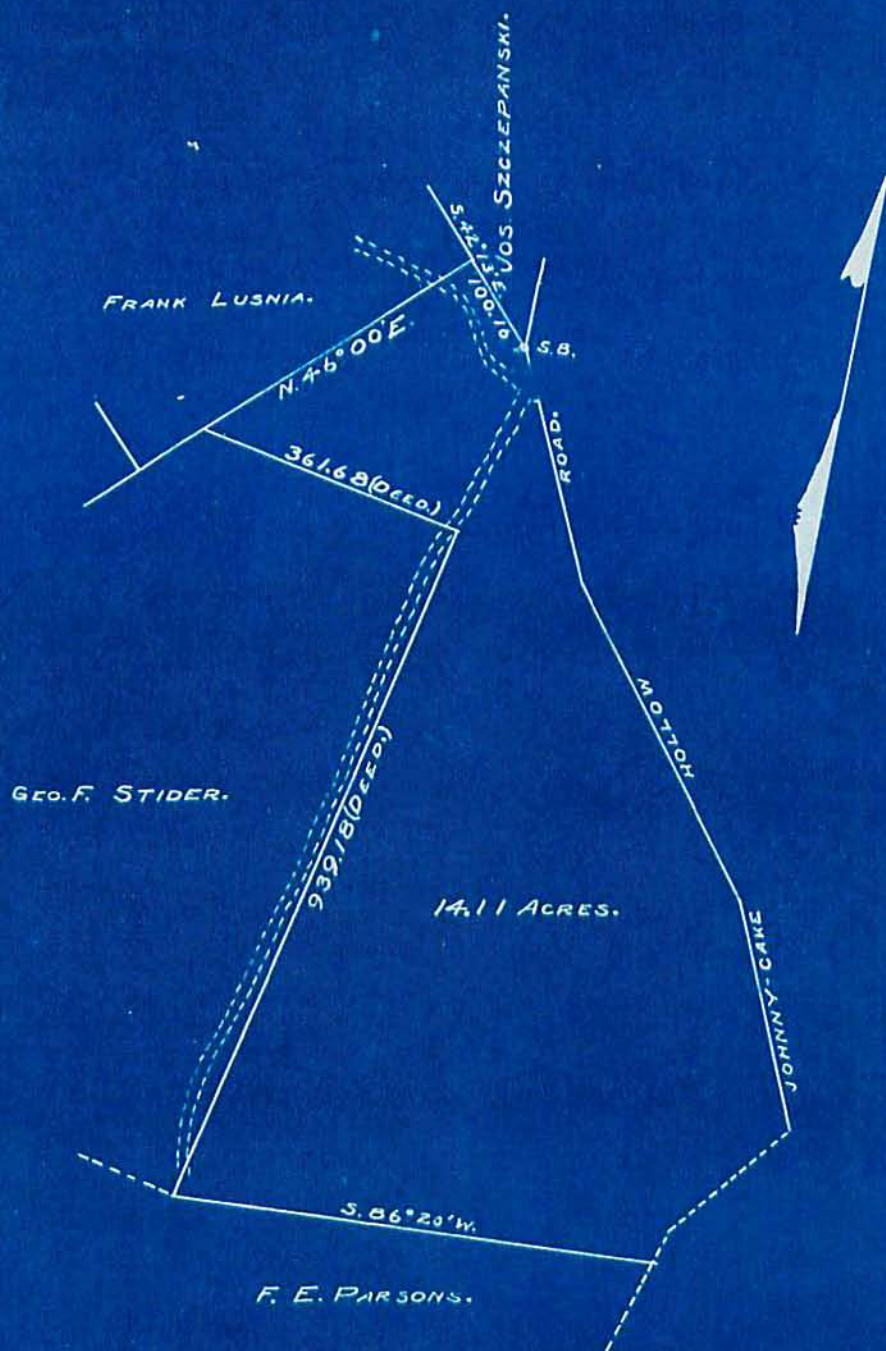
PLAN OF LAND  
OWNED BY  
**F. E. PARSONS**  
CHICOPEE, MASS.  
SCALE: 1" = 200' MAY 1914.  
GEO. & DEEDS 1 MILES CHILMARKS  
SPRINGFIELD, MASS.



F. E. Parsons to the City of Chicopee.  
-----

Beginning at a point in the center of Cooley Brook so called at land of Joseph Lerne; thence running North  $34^{\circ} 58'$  West, about 240.0 feet to an iron pin near a pine tree standing on the top of the hill; thence along land of said Lerne North  $65^{\circ} 49'$  West, 379.54 feet to an iron pin in the Easterly line of the road known as Johnny-Cake Hollow Road; thence South  $86^{\circ} 20'$  West across said road and by land of party unknown, 728.23 feet to a corner of land thought to be owned by Almeda Snow; thence South  $1^{\circ} 15'$  West along land of said Snow,  $759\frac{1}{2}$  feet to Cooley Brook; thence continuing the same course by land of one Rumrill 544.0 feet to a point; thence South  $79^{\circ} 58'$  East, 1573.0 feet along the Northerly line of said Rumrill to stake and stones at the South West corner of land owned by Mary J. Hamilton; thence North  $11^{\circ} 23'$  East by land of said Hamilton, 337.39 feet to a stone bound at the South Easterly corner of land owned by the City of Chicopee; thence North  $47^{\circ} 23'$  West, 399.72 feet to a stake; thence South  $87^{\circ} 13'$  West, 351.16 feet to a stone bound; thence North  $58^{\circ} 30'$  East, 29.0 feet to a stone bound; thence North  $54^{\circ} 53'$  West, 206.10 feet to a stone bound; thence North  $10^{\circ} 52'$  East, 75.0 feet to the center of said Cooley Brook. The last five courses bounding on the City of Chicopee; thence North Easterly by the center of said Brook to the point of beginning, said contract containing about 39.33 acres of land, and being land conveyed to said Parsons in deed H.R.D., book 640, page 596.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

UNKNOWN

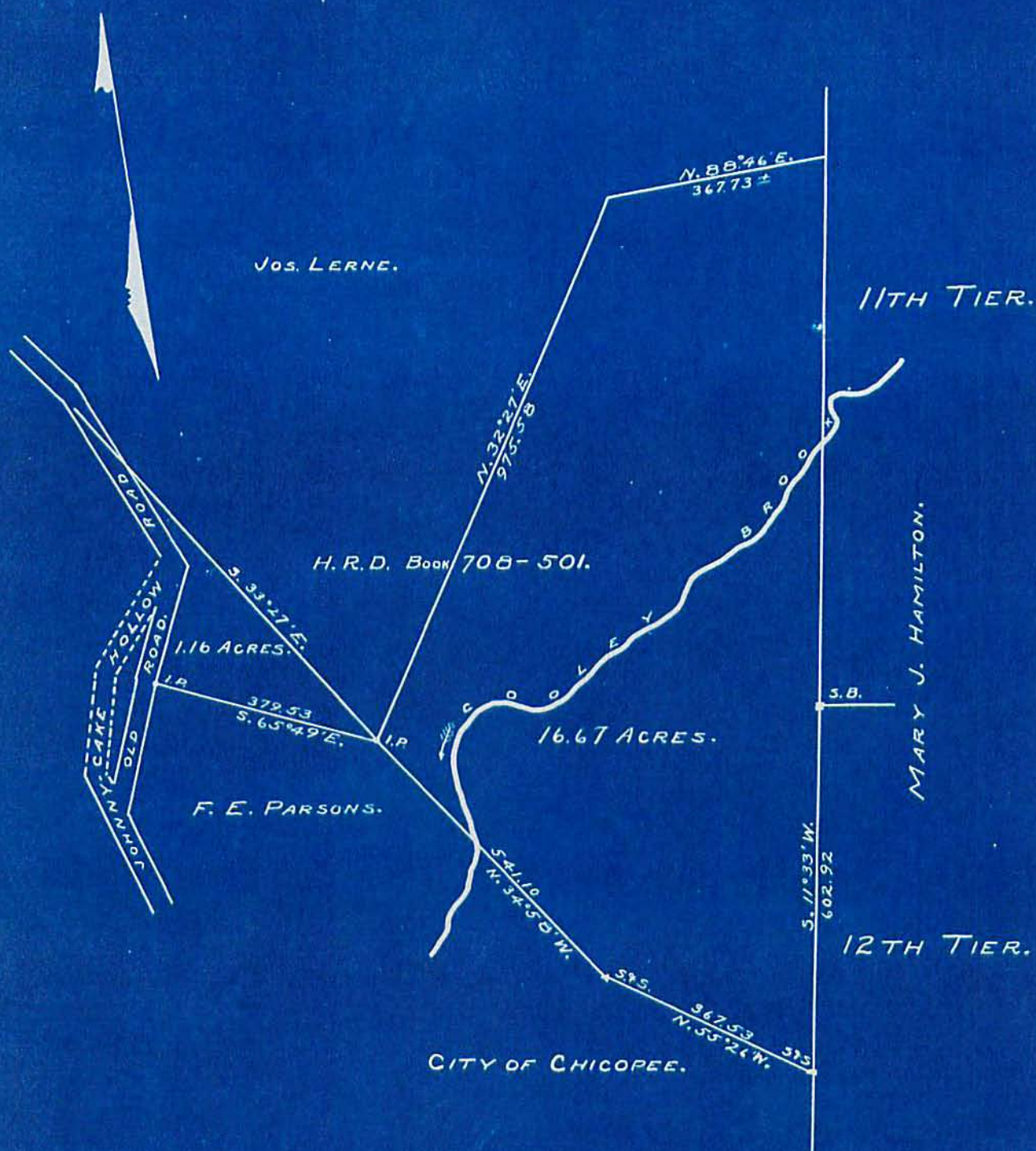
SCALE: 1 in. = 200 ft. JUNE, 1914.  
COBB, BEESLEY AND MILES, CIV. ENG'RS. SPRINGFIELD, MASS.



Unknown to City of Chicopee.

Beginning at a stone bound on the Westerly side of Johnny-Cake Hollow Road at land of Joseph Szczepanski; thence running Southerly along the Westerly line of said road to land of F. E. Parsons; thence  $86^{\circ} 20'$  West to land supposed to be of George F. Stider, being also the North West corner of land of said Parsons; thence Northerly 939.18 feet to a point; thence Westerly 361.68 feet to land of Frank Lusnia. The last two courses being along land of said Stider; thence North  $46^{\circ}$  no minutes East, to stake and stone at land of Joseph Szczepanski; thence South  $42^{\circ} 13'$  East, 100.16 feet to point of beginning, containing 14.11 acres.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**JOS. LERNE,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 ft.

JUNE-1914.

COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Joseph Lerne to City of Chicopee.

Beginning at an iron pin on the Easterly side of Johnny-Cake Hollow Road, and running thence South  $65^{\circ} 49'$  East by land of F. E. Parsons, 379.53 feet to an iron pin near a pine tree on top of the hill; thence North  $33^{\circ} 27'$  West to the Easterly side of said Johnny-Cake Hollow Road; thence South by the Easterly side of said road to point of beginning, containing about 1.16 acres.

Second Parcel

Beginning at a stake and stone in the North East corner of land owned by the City of Chicopee, being in the 12th tier on the line betweenland of City of Chicopee and Mary J. Hamilton, and running thence North  $55^{\circ} 26'$  West, 367.53 feet to a stake and stone; thence running North  $34^{\circ} 58'$  West, crossing Cooley Brook 541.10 feet to an iron pin on top of hill.

The last two courses by land of City of Chicopee and F. E. Parsons; thence North  $32^{\circ} 27'$  East, 975.58 feet to a point; thence North  $88^{\circ} 46'$  East, about 367.75 feet to land of Mary J. Hamilton in the 11th tier; thence South by land of Mary J. Hamilton again crossing said Cooley Brook to a stone bound, marking the line between the 11th and 12th tiers; thence South  $11^{\circ} 33'$  West, 602.92 feet to point of beginning. Containing about 16.67 acres.

The above two parcels being part of land conveyed to Joseph Lerne by Quartus J. Smith Estate, H.R.D., book 708, page 501.



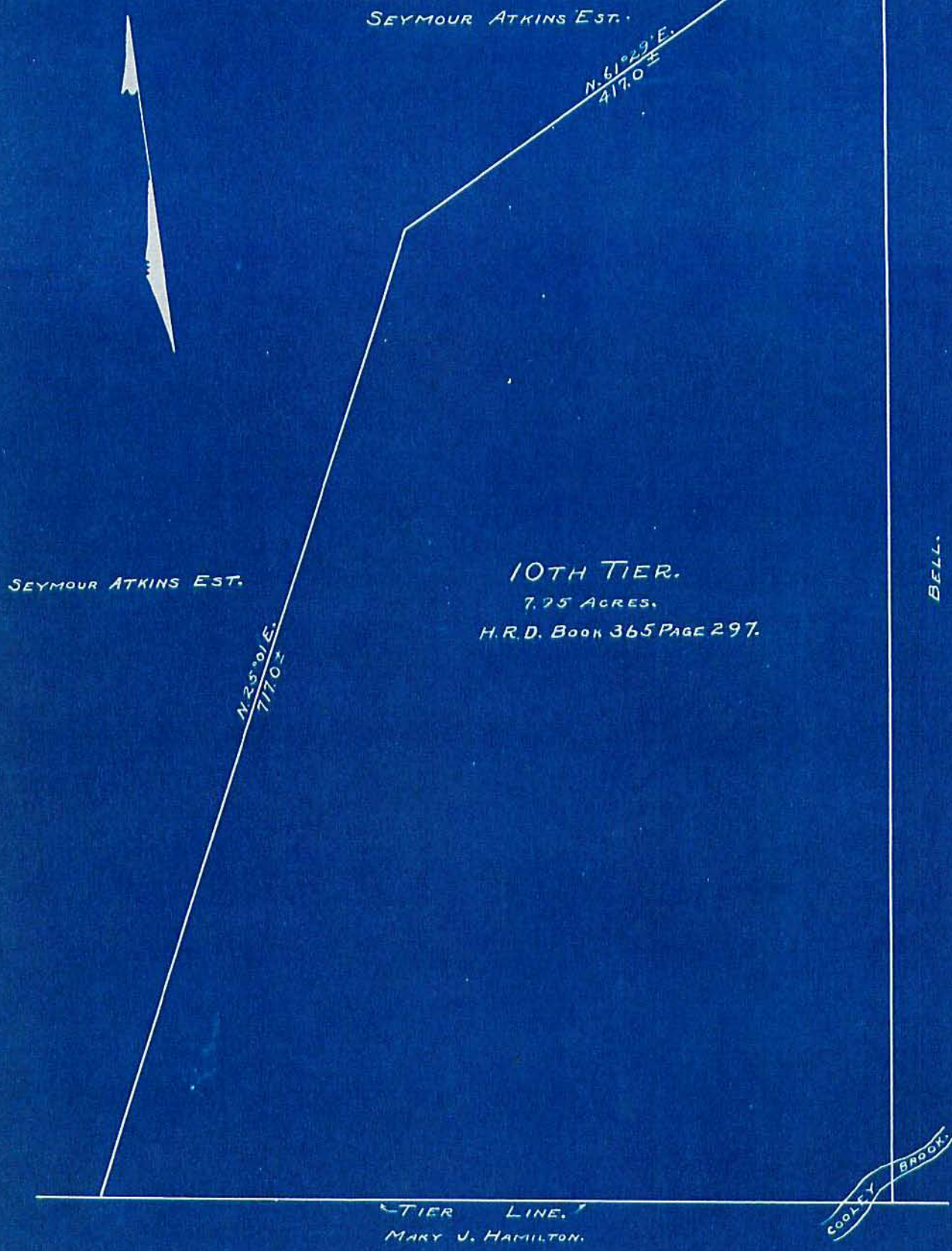




Mary J. Hamilton to City of Chicopee.

Beginning at a stone bound in the Southerly line of the 11th tier at land of Joseph Lerne, and running thence Northerly by land of said Lerne crossing Cooley Brook to the Northerly line of said 11th tier, and running thence Easterly by said tier line along land of owner unknown, Estate of Seymour D. Atkins and Thomas J. Bell Estate, again crossing Cooley Brook to stone bound at land of Goodman Burnett; thence South 7 degrees, 52 minutes West, 1506.43 feet to a stone bound on the Southerly line of said tier at other land owned by said Mary J. Hamilton; thence North 81 degrees, 50 minutes West by said tier line, 1852.40 feet to point of beginning.     Containing about 61.50 acres.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**SEYMOUR ATKINS EST.,**  
CHICOPEE, MASS.  
SCALE: 1 IN. = 80 FT. JUNE, 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.

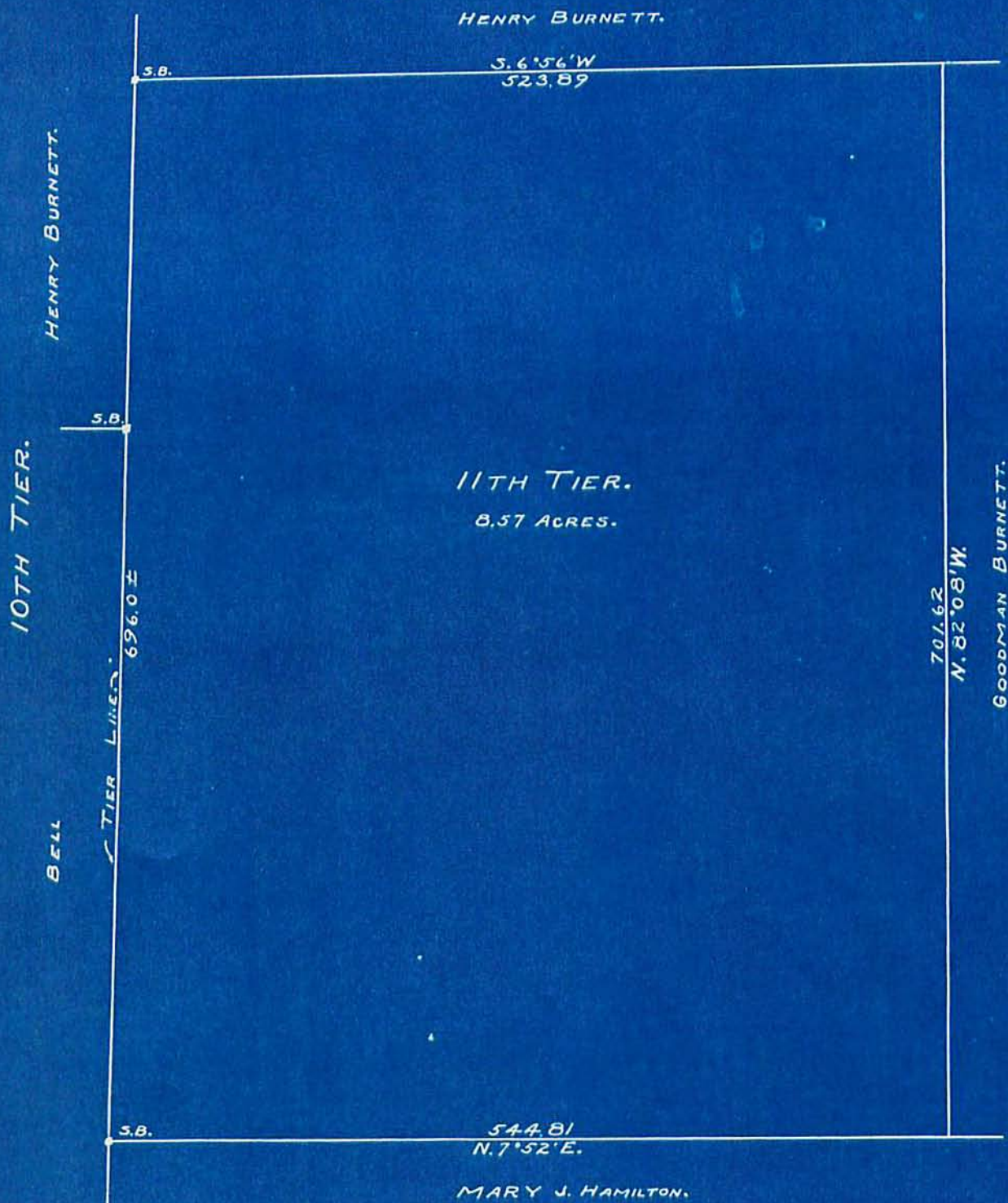


Seymour D. Atkins Estate to City of Chicopee.

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Beginning on the Southerly line of the 10th tier, about 813.0 feet Easterly of the North East corner of land owned by Joseph Lerne; thence running North 25° 1' East, about 717.0 feet; thence North 61° 29' East, about 417.0 feet to line between Seymour D. Atkins Estate and Thomas J. Bell Estate. The last two courses being along land of said Atkins; thence Southerly by land of said Bell to a point near Cooley Brook, and being the South West corner of land owned by said Bell, and being on the Southerly line of said 10th tier; thence running Westerly along said tier line by land of Mary J. Hamilton to point of beginning. Containing about 7.95 acres, and being land described in H.R.D., book 365, page 297, to Seymour D. Atkins Estate from Frank P. Keyes.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**GOODMAN BURNETT,**  
CHICOPEE, MASS.

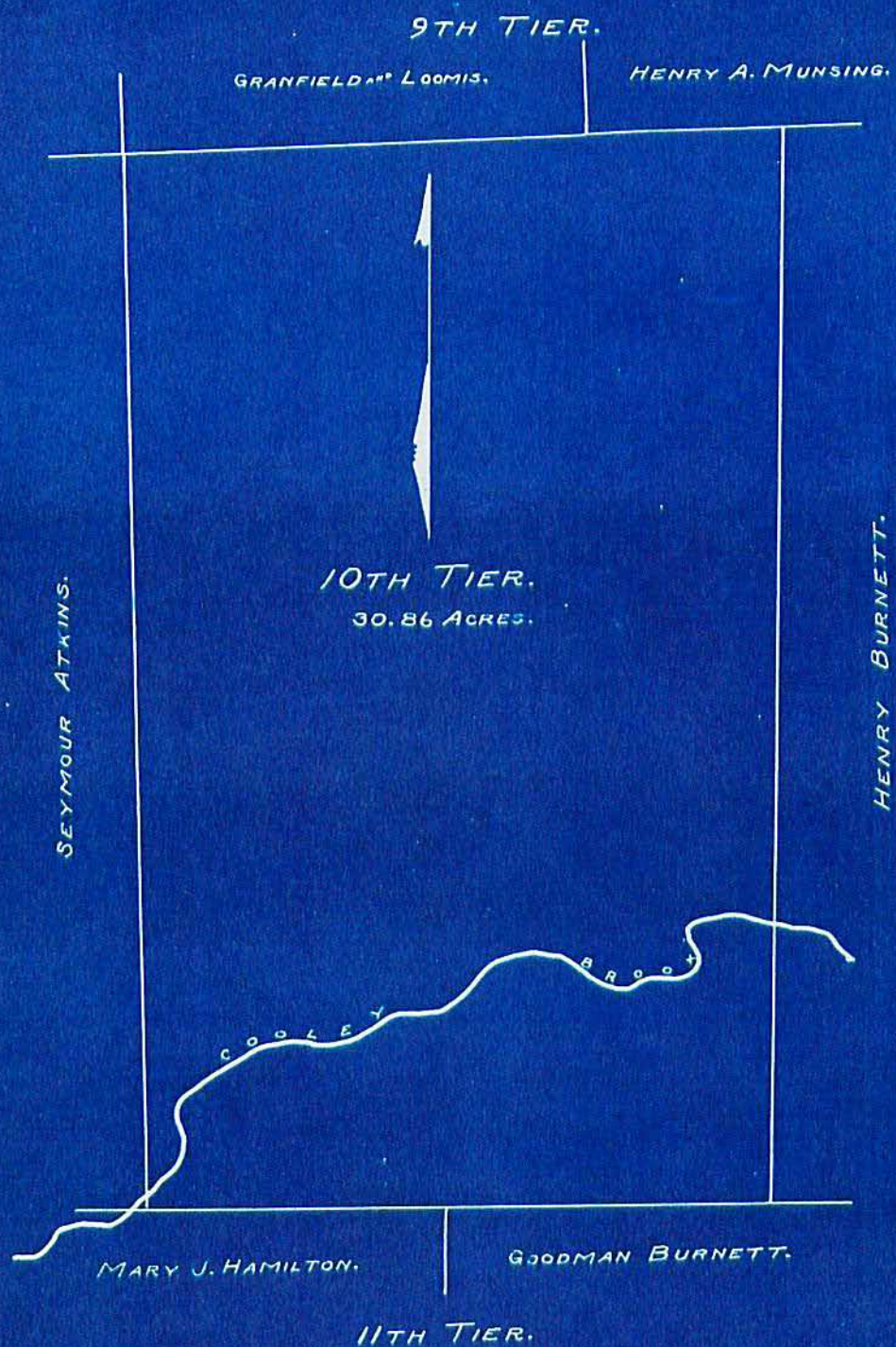
SCALE: 1 in. = 80 FT. JUNE-1914.  
COBB, BEESLEY AND MILES, CIV. ENG'RS, SPRINGFIELD, MASS.



Goodman A. Burnett to City of Chicopee.

Beginning at a stone bound on the Northerly line of the 11th tier being the North East corner of land owned by Mary J. Hamilton in the said 11th tier; and running Easterly along the Northerly line of said tier by land of Hiram W. Bell, and Henry Burnett, about 696.0 feet to a stone bound; thence South  $6^{\circ} 56'$  West, 523.89 feet by other land of Henry Burnett to a point; thence North  $82^{\circ} 8'$  West by land of said Goodman Burnett, 701.62 feet to a point on line between land of Mary J. Hamilton and said Goodman Burnett; thence North  $7^{\circ} 52'$  East, 544.81 feet to point of beginning. Containing about 8.57 acres.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**HIRAM W. BELL,**  
SPRINGFIELD, MASS.

SCALE: 1/4" = 200 FT.

JUNE-1914.

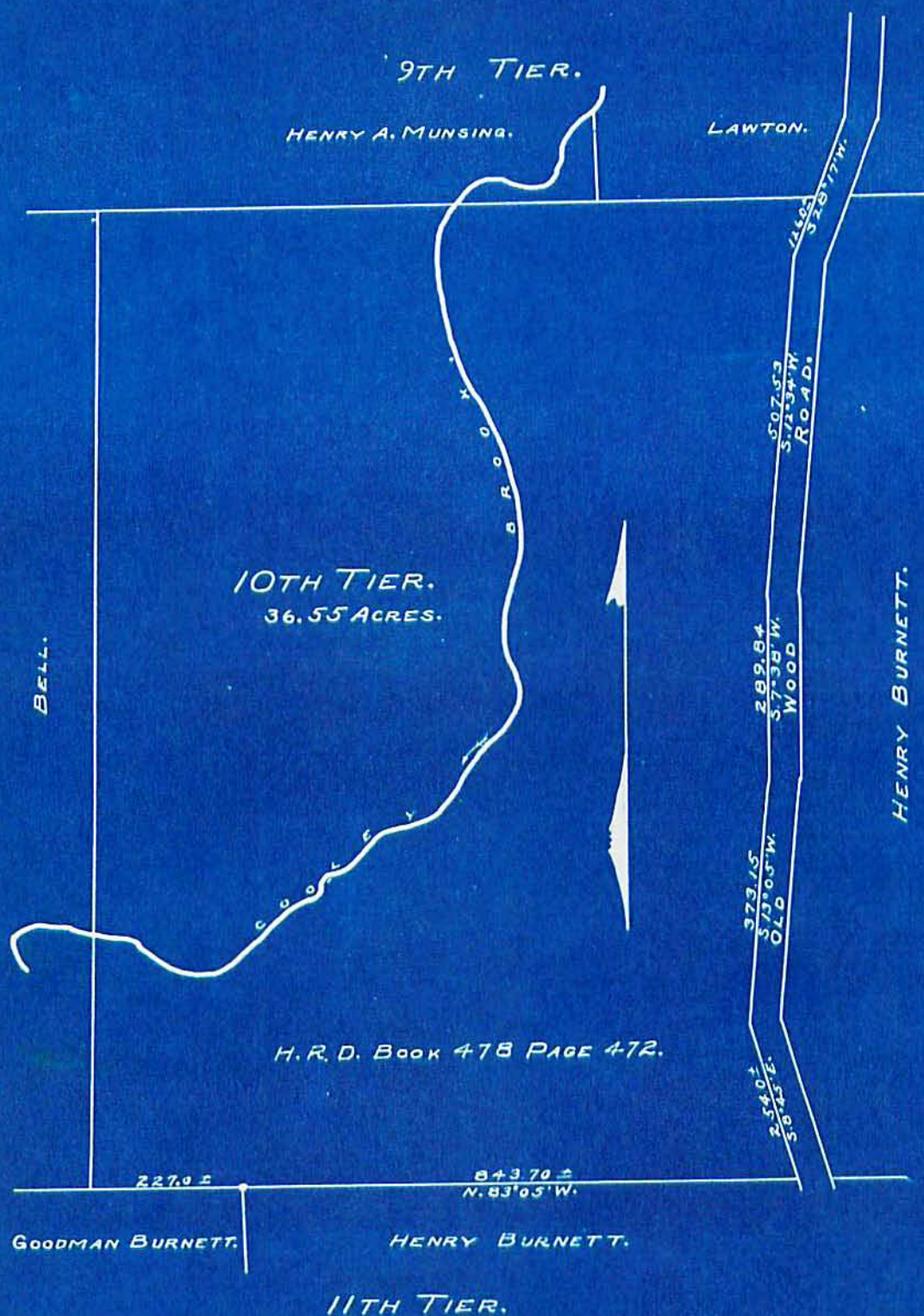
COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Hiram W. Bell to City of Chicopee.  
-----

Beginning at a stone bound in the Southerly part of the 10th tier, and being the South West corner of land owned by Henry Burnett, and running thence Westerly on the Southerly line of 10th tier to a point near Cooley Brook, being the South East corner of land owned by Seymour D. Atkins Estate, thence Northerly to the Northerly line of said 10th tier to land of Granfield & Loomis; thence Easterly on the Northerly line of said tier by land of Granfield & Loomis and Henry A. Munsing to a point, being the North West corner of said Henry Burnett's land; thence Southerly along land of said Burnett, crossing Cooley Brook to point of beginning.      Containing about 30.86 acres of land.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**HENRY BURNETT,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 ft.

JUNE-1914.

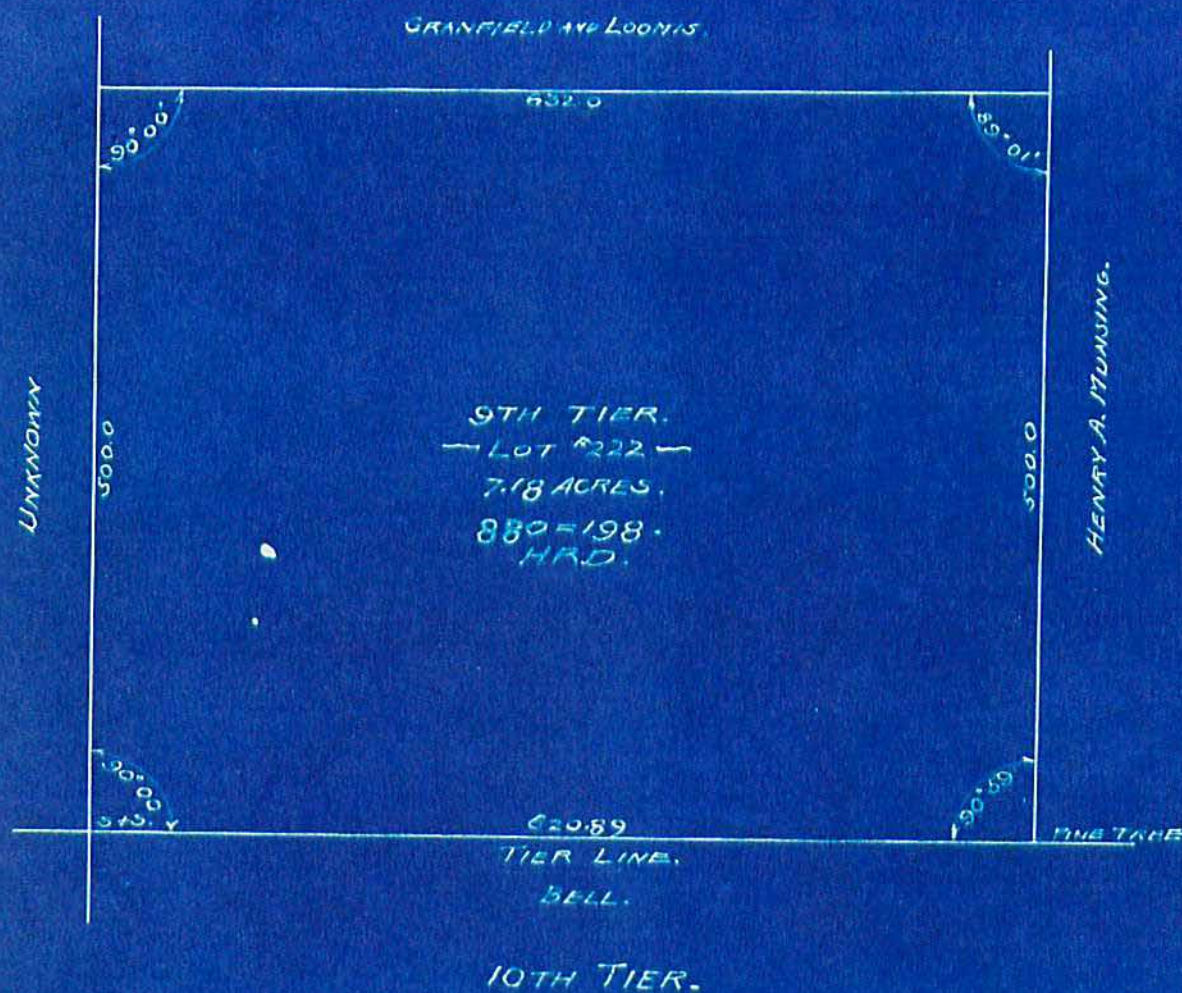
COBB, BEESLEY & SONS, CIV. ENGRS., SPRINGFIELD, MASS.



Henry Burnett to City of Chicopee.

Beginning at the intersection of the line between the 9th and 10th tiers and the Westerly side of old wood road; thence running South  $28^{\circ} 17'$  West, about 126.0 feet; thence South  $12^{\circ} 34'$  West, 507.53 feet; thence South  $7^{\circ} 38'$  West, 289.84 feet; thence South  $13^{\circ} 5'$  West, 373.15 feet; thence South  $8^{\circ} 45'$  East, about 254.0 feet, being the intersection of the line between the 10th and 11th tiers with the Westerly side of said old wood road, and the last five courses being the Westerly side of said old wood road; thence North  $83^{\circ} 5'$  West, about 843.70 feet to a stone bound on the Southerly line of the 10th tier, being the North West corner of other land of Henry Burnett; thence continuing Westerly on same tier line about 227.0 feet by land of Goodman Burnett to the South East corner of land formerly owned by Thomas J. Bell Estate; thence Northerly by land of said Bell crossing Cooley Brook to the Northerly line of the said 10th tier; thence Easterly on said tier line by land of Henry A. Munsing, again crossing Cooley Brook and land of one Lawton, to the point of beginning. Containing about 36.55 acres of land, and being land conveyed to said Henry Burnett by deed H.R.D., book 478, page 472. 994-5





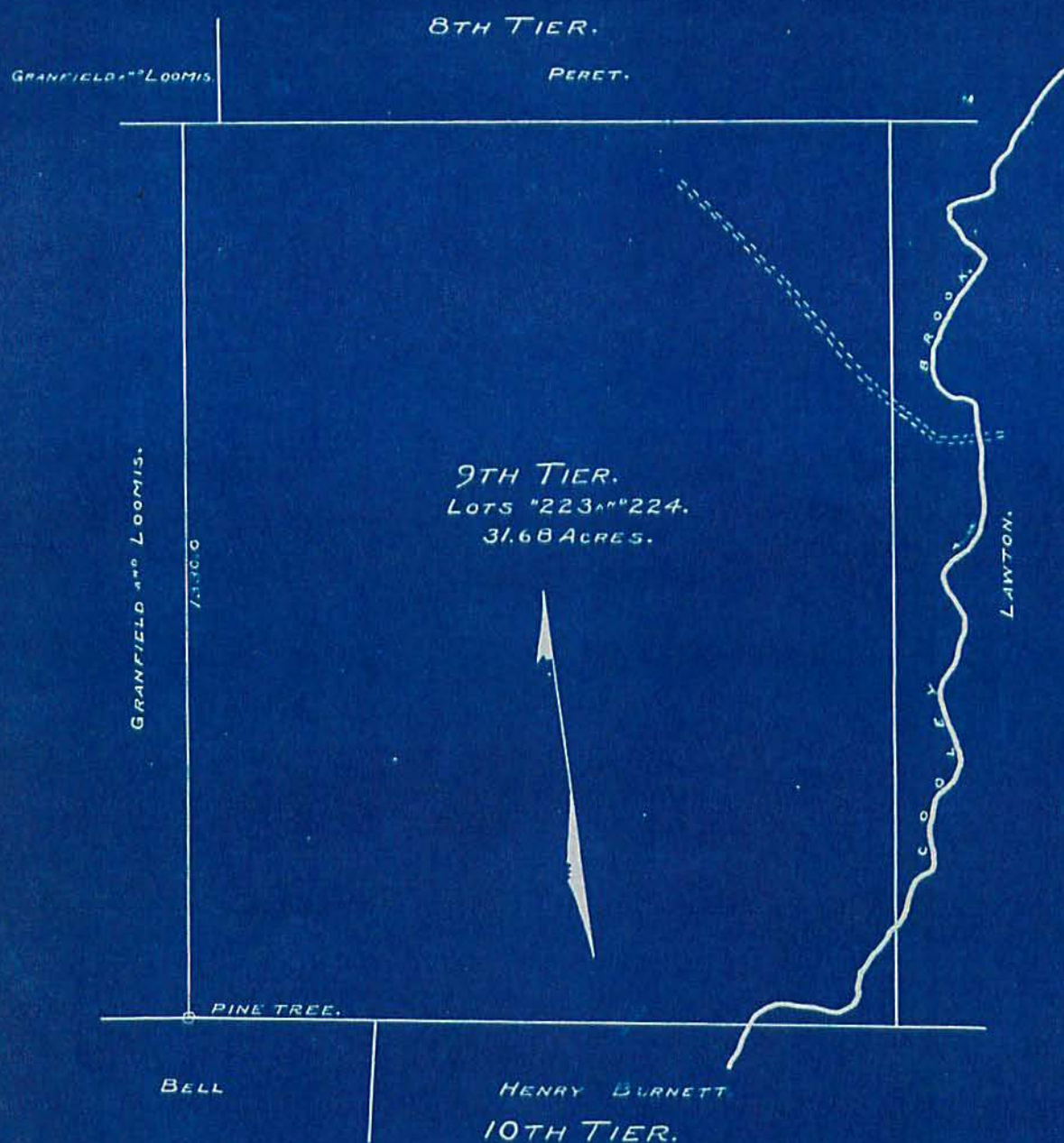
PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**GRANFIELD AND LOOMIS,**  
CHICOPEE, MASS.  
SCALE 1 IN = 100 FT. JUNE-1914.  
CORD, BEESLEY AND MILES, CIV. ENGRS, SPRINGFIELD, MASS.



Granfield & Loomis to City of Chicopee.

Beginning at a pine tree that is on the Southerly line of the 9th tier, the same being the South Westerly corner of land owned by Henry A. Munsing; and running thence Westerly on the said tier line 620.89 feet to a stake and stone; thence Northerly at right angles to said tier line, 500.0 feet by land of owner unknown to a point; thence Easterly at right angles about 632.0 feet to land of Henry A. Munsing; thence Southerly by an included angle of  $89^{\circ} 1'$ , 500.0 feet to point of beginning. This is intended to convey the Southerly portion of land conveyed to Granfield & Loomis, said land being in the 9th tier and being lot #222, as per deed H.R.D., book 880, page 198. Containing about 7.18 acres of land.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**HENRY A. MUNSING,**  
LUDLOW, MASS.

SCALE: - 1 in. = 200 ft.

JUNE-1914.

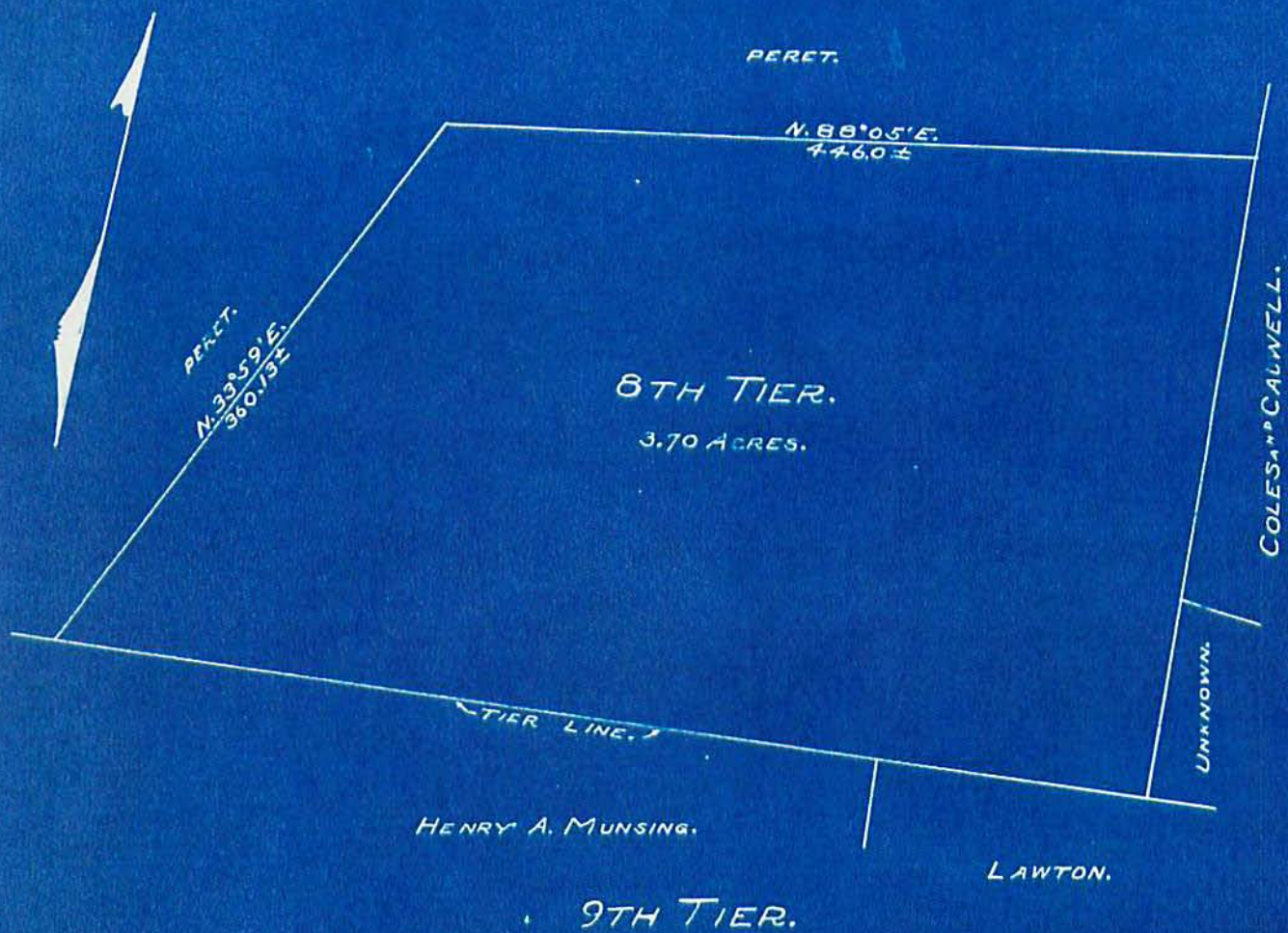
COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Henry A. Munsing to City of Chicopee.

Beginning at a pine tree, said tree being on the Southerly line of the 9th tier, and being the South Easterly corner of land owned by Granfield & Loomis; and running thence Northerly by land of said Granfield & Loomis, 1330.0 feet to a point on the Northerly line of said 9th tier; thence Easterly by said North line of said 9th tier by other land of Granfield & Loomis and land of one Peret, crossing Pendleton Avenue to the North West corner of land of one Lawton; thence Southerly by land of said Lawton, again crossing said Pendleton Avenue, also crossing Cooley Brook, to the South West corner of land of said Lawton, and being in the Southerly line of the said 9th tier; thence Westerly by land of Henry Burnett again crossing Cooley Brook and land of Hiram W. Bell, to point of beginning, being lots No. 223 and 224 in the 9th tier and containing about 31.68 acres of land.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**PERET,**  
CHICOPEE, MASS.

SCALE: 1" = 80 FT.

JUNE, 1914

COBB, BEESLEY & MILES, CIV. ENGRS.

SPRINGFIELD, MASS.



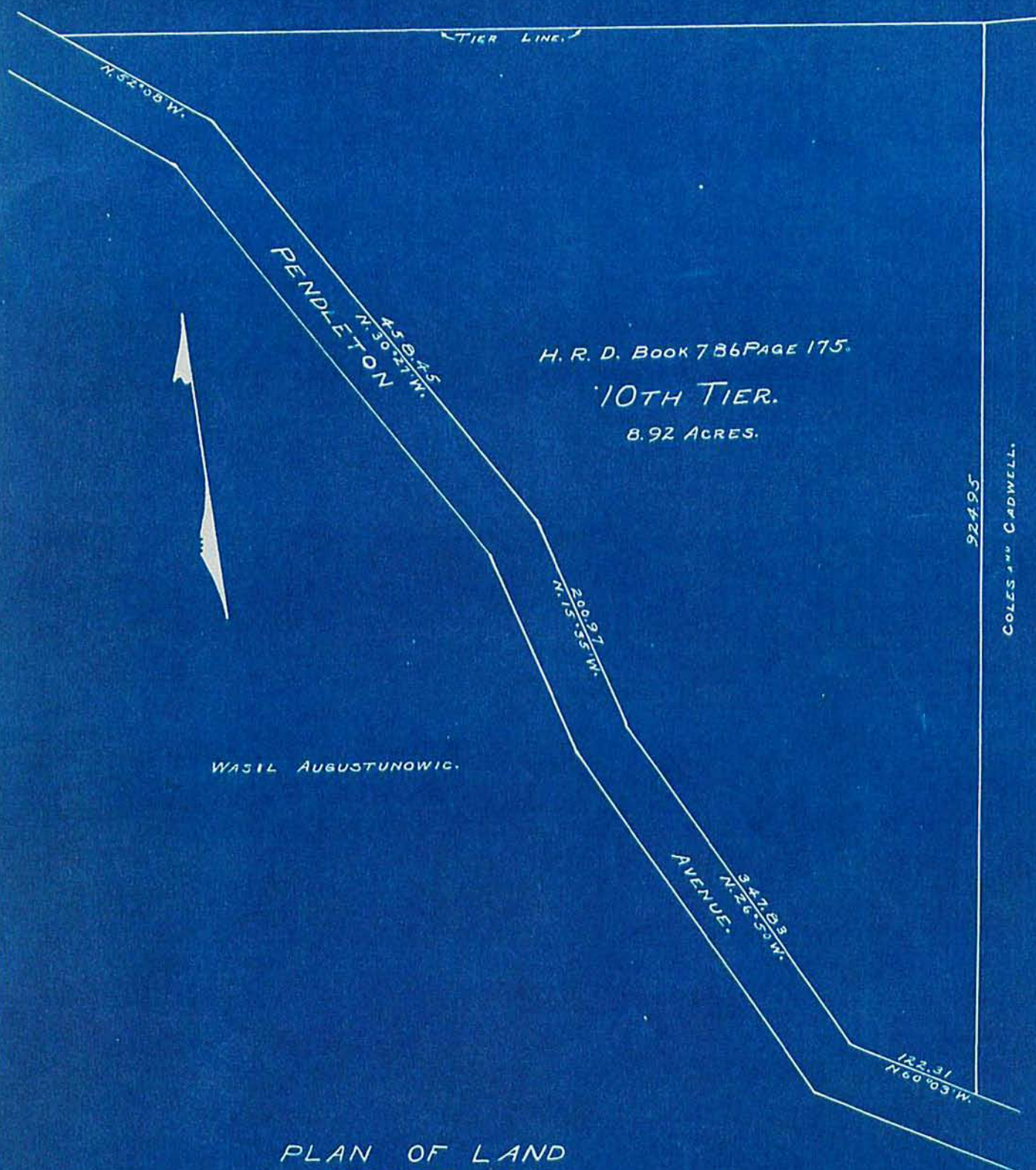
Peret to City of Chicopee.

Beginning on the Southerly line of the 8th tier at a point about 528.0 feet Easterly of the North West corner of lot No. 223 in the 9th tier owned by Henry A. Munsing, and running thence North  $33^{\circ} 59'$  East, 360.13 feet to a point; thence North  $88^{\circ} 5'$  East, about 446.0 feet to land of Cowles & Cadwell; thence Southerly by land of said Cowles & Cadwell and land of owner unknown, to a point on the Southerly line of the said 8th tier; thence Westerly by the Southerly line of said 8th tier to point of beginning.      Containing about 3.70 acres of land.



9TH TIER.

C.C. ABBEY.



H. R. D. BOOK 736 PAGE 175.

10TH TIER.

8.92 ACRES.

WASIL AUGUSTUNOWIC.

924.95

COLES & CADWELL.

PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

**WASIL AUGUSTUNOWIC,**  
CHICOPEE, MASS.

SCALE: 1 in. = 100 FT.

JUNE, 1914.

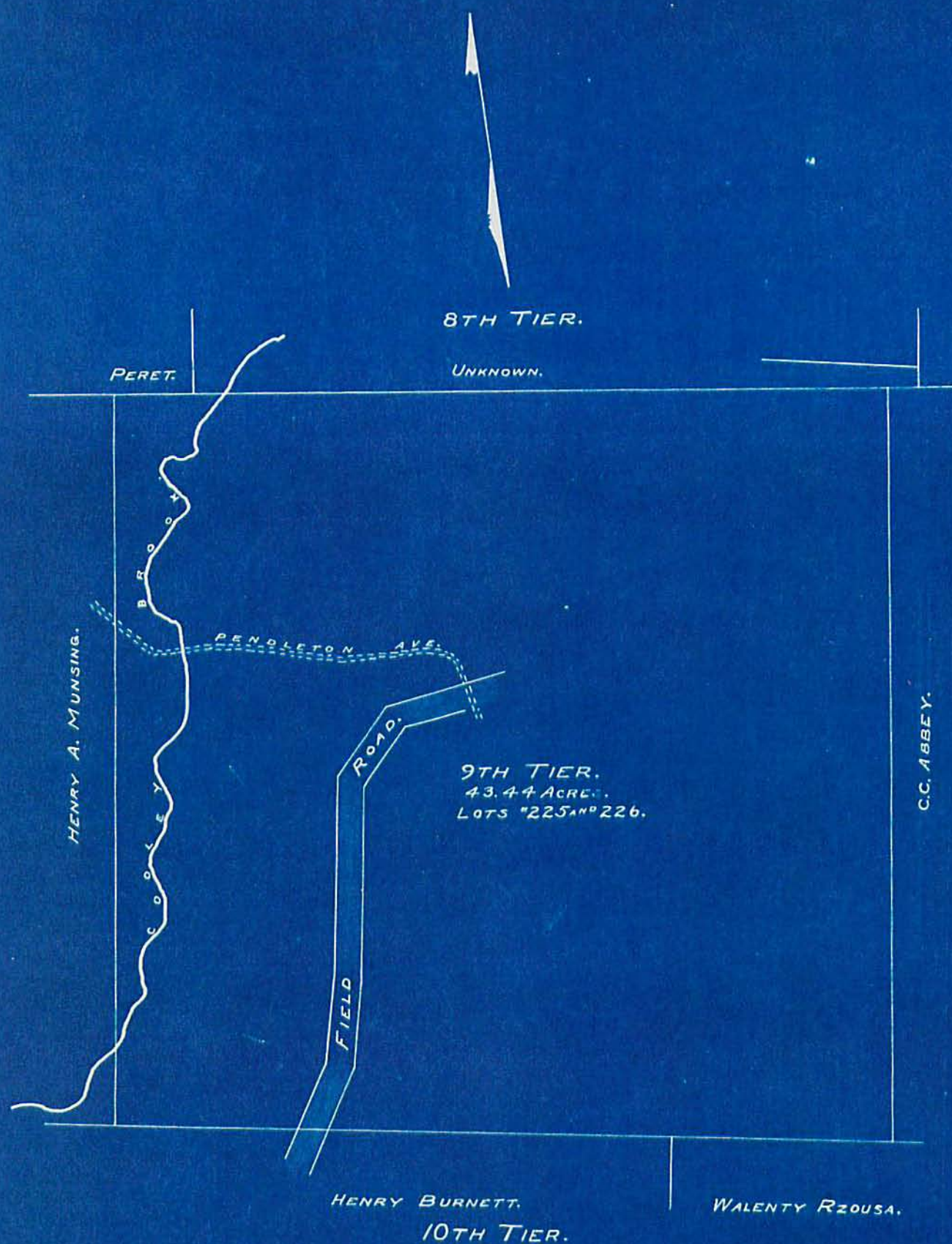
COBB, BEESLEY & MILES, CIV. ENG'RS, SPRINGFIELD, MASS.



Wasil Augustunowic to City of Chicopee.

Beginning at a stake and stone on the Northerly side of Pendleton Avenue at land of Cowles & Cadwell, and being in the 10th tier of lots and running thence North  $60^{\circ} 3'$  West 122.31 feet; thence North  $26^{\circ} 50'$  West, 347.83 feet to a point; thence North  $15^{\circ} 35'$  West, 200.97 feet to a point; thence North  $30^{\circ} 27'$  West, 458.45 feet to a point; thence North  $52^{\circ} 8'$  West to the inner section of the line between the 9th and 10th tiers. The last five courses being the Northerly line of said Pendleton Avenue at land thought to be owned by C. C. Abbey; thence Easterly along said tier line to corner of land owned by Cowles & Cadwell aforesaid; thence Southerly by land of said Cowles & Cadwell, 924.95 feet to point of beginning. Containing about 8.92 acres, and being part of land conveyed to said Wasil Augustunowic by deed H.R.D., book 786, page 175.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

**LAWTON,**

SCALE: 1 IN. = 200 FT.  
COBB, BEESLEY AND MILES, CIV. ENGRS. JUNE - 1914.  
SPRINGFIELD, MASS.

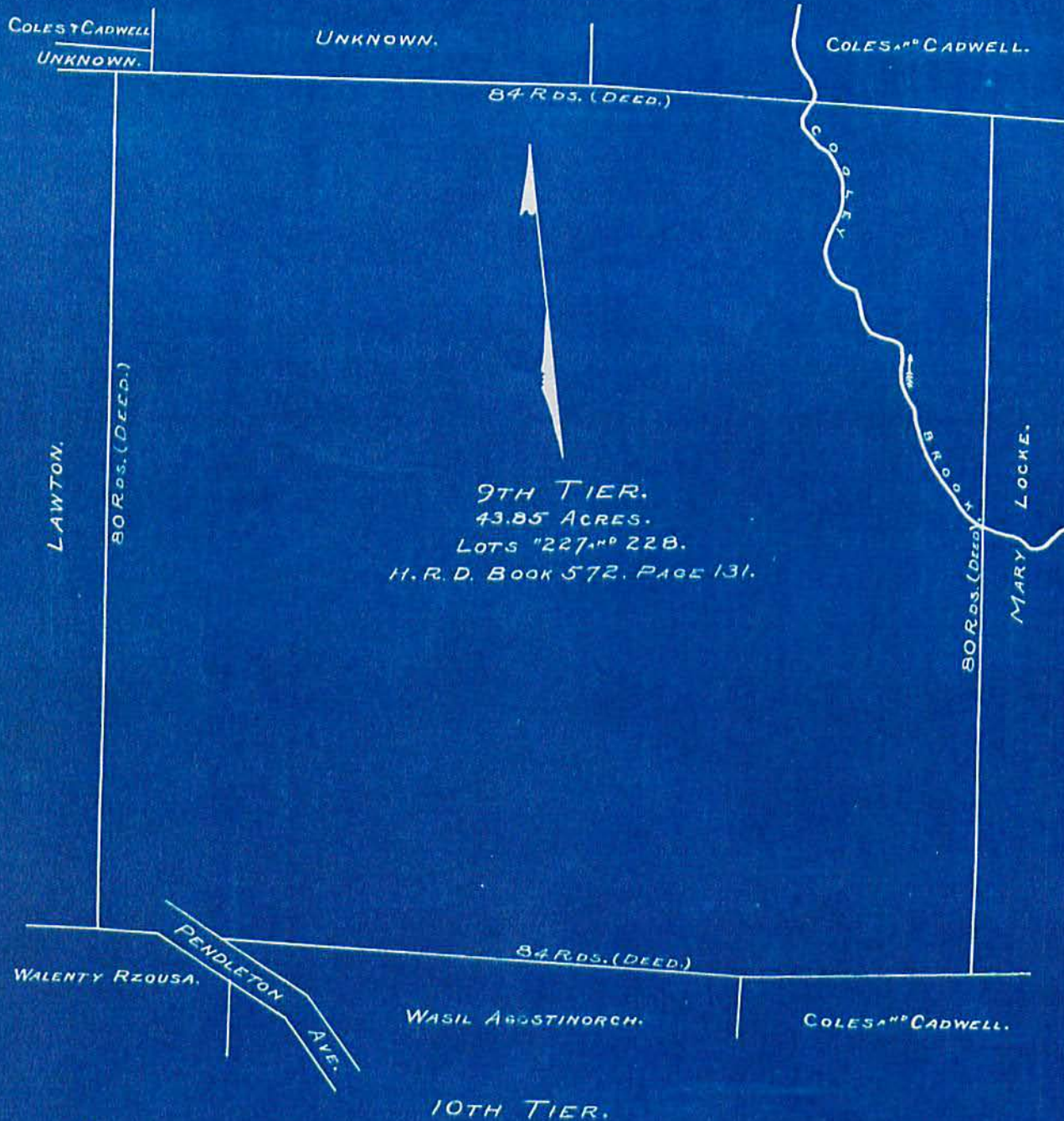


Lawton to City of Chicopee.

Beginning on the Southerly line of the 9th tier at the South East corner of Henry A. Munsing's lot, #224, and running thence Northerly by said Munsing's land across Cooley Brook and thence across Pendleton Avenue to the Northerly line of said 9th tier at land of one Peret, also being the North East corner of said Munsing's lot #224; thence Easterly along the Northerly line of said 9th tier crossing Cooley Brook to a corner thought to be the North West corner of land owned by C. C. Abbey, and being lot #227; thence Southerly by said Abbey's land to the Southerly line of the 9th tier aforesaid; thence Westerly by said Southerly line of 9th tier crossing an old wood road to point of beginning. Containing about 43.44 acres and being lots No.225 and 226.



8TH TIER.



PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**C. C. ABBEY,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 ft.  
COBB, BEESLEY & MILES,

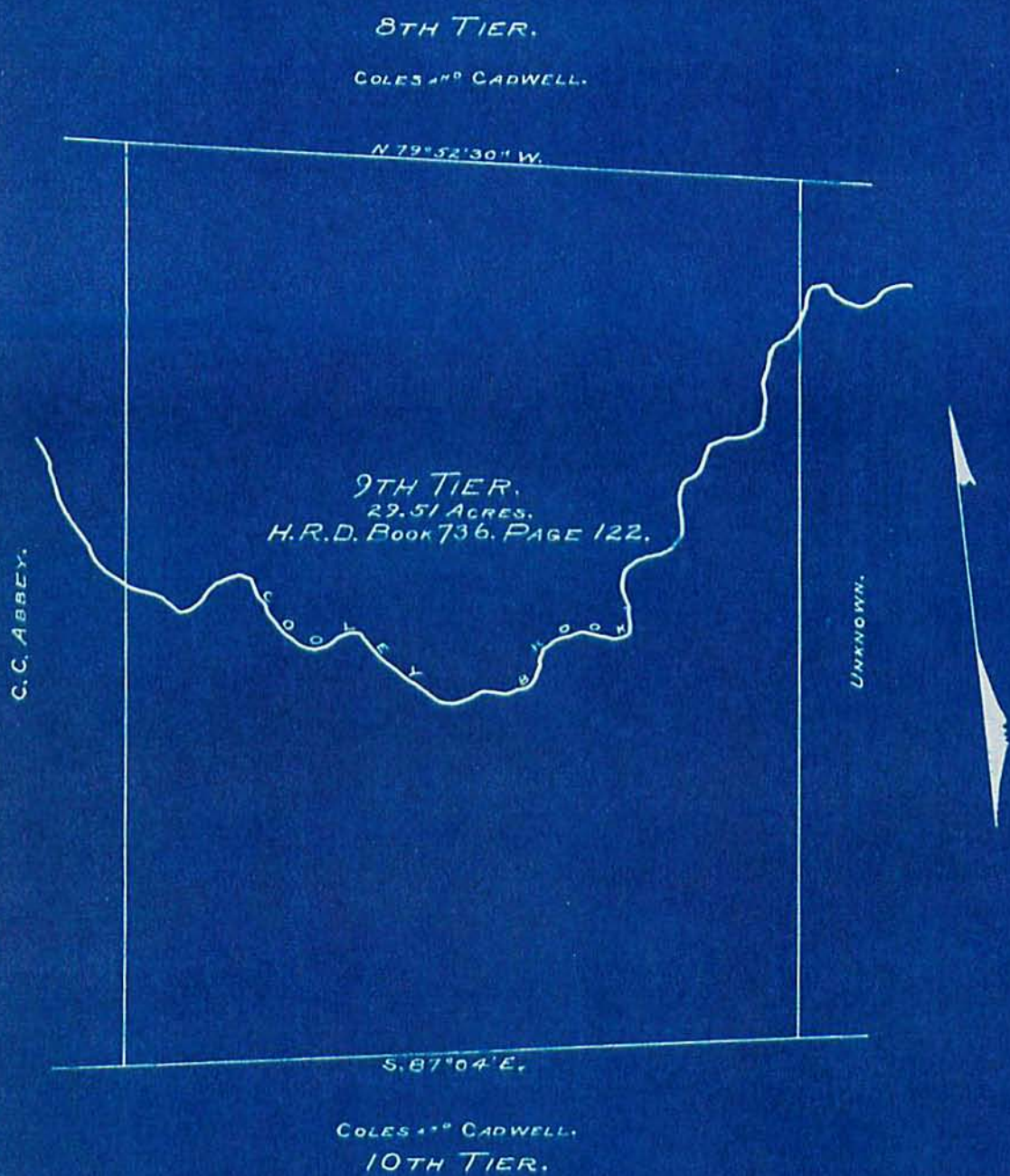
JUNE, 1914.  
SPRINGFIELD, MASS.



C. C. Abbey to City of Chicopee.

Beginning at the South West corner of the lot herein conveyed on the tier line; thence running East on the tier line 84 rods, more or less, to land now or formerly of N. B. Paulk; thence North 80 rods to the tier line; thence West 84 rods, more or less, to land formerly of C. W. Chapin, et al; thence South parallel with the East line to the place of beginning, containing 42 acres, more or less, being land conveyed to C. C. Abbey by Matthew Ryan by deed H.R.D., book 572, page 131.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**MARYA. LOCKE,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 ft. JUNE-1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Mary A. Locke to City of Chicopee.

A certain lot of wood land in said Chicopee containing 30 acres, more or less, at Spruce Swamp, so called, bounded Easterly and Southerly by land of one Paulk, Westerly by land of Charles C. Abbey, Northerly by land of owner unknown, being a part of the premises set off to Abigail Chapin in a division of the estate of Zerah Chapin, and therein described as 30 acres of land at Spruce Swamp, beginning at the North West corner of lot No.329 (of the inward commons of Springfield) measuring Easterly 60 rods, Southerly 80 rods, Westerly 60 rods, Northerly 80 rods. The above description being taken from deed to Mary A. Locke from Theodore L. Chapin and being registered H.R.D., book 736, page 122.



MARY LOCKE.

9TH TIER.  
8.27 ACRES.

1230.35±

COLES AND CADWELL.



PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

UNKNOWN.

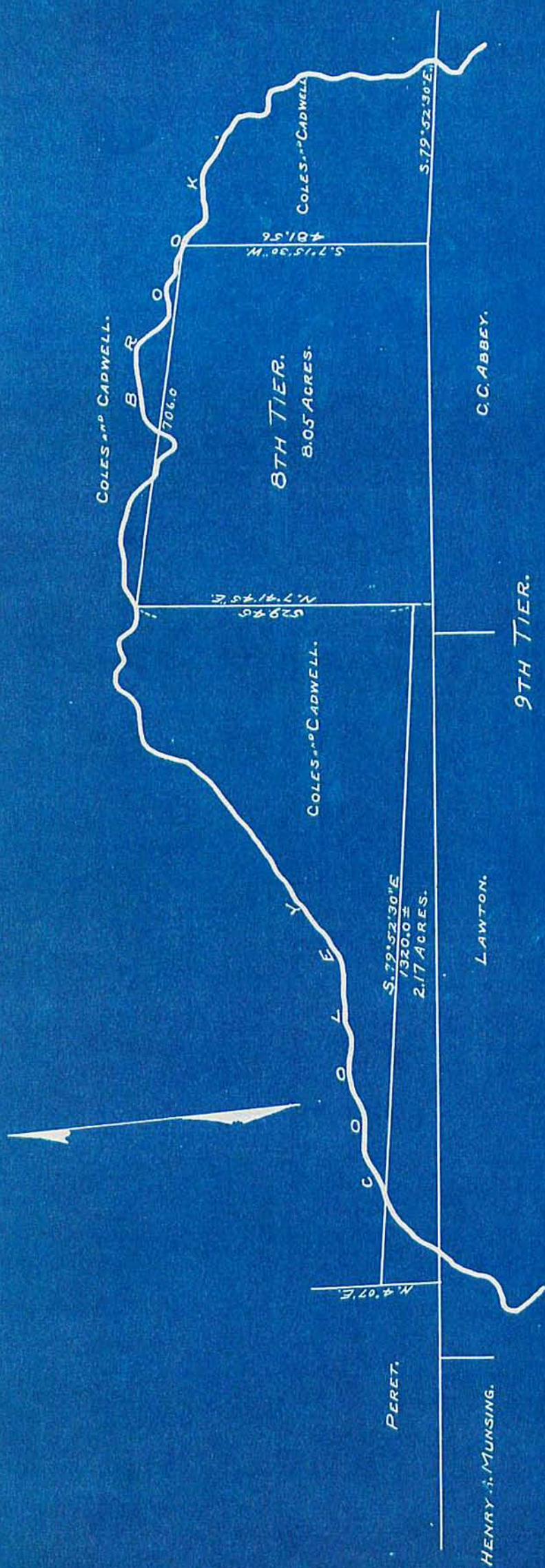
SCALE: 1 in. = 100 FT. JUNE, 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Unknown to City of Chicopee.  
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Beginning at a point in the Southerly line of the 9th tier at a corner thought to be the South East corner of land owned by Mary Locke as per H.R.D., book 114, page 138, describing lot #229, and running thence Northerly by the Easterly line of said Mary Locke's land, crossing Cooley Brook to the Northerly line of the 9th tier at land of Cowles & Cadwell; thence South  $79^{\circ} 52' 30''$  East, again crossing Cooley Brook to a corner of land owned by Cowles & Cadwell; thence Southerly by land of said Cowles & Cadwell, about 1230.35 feet to a corner; thence North  $87^{\circ} 4'$  West by land of said Cowles & Cadwell, and being the Southerly line of the 9th tier aforesaid to point of beginning. Containing about 8.27 acres of land.





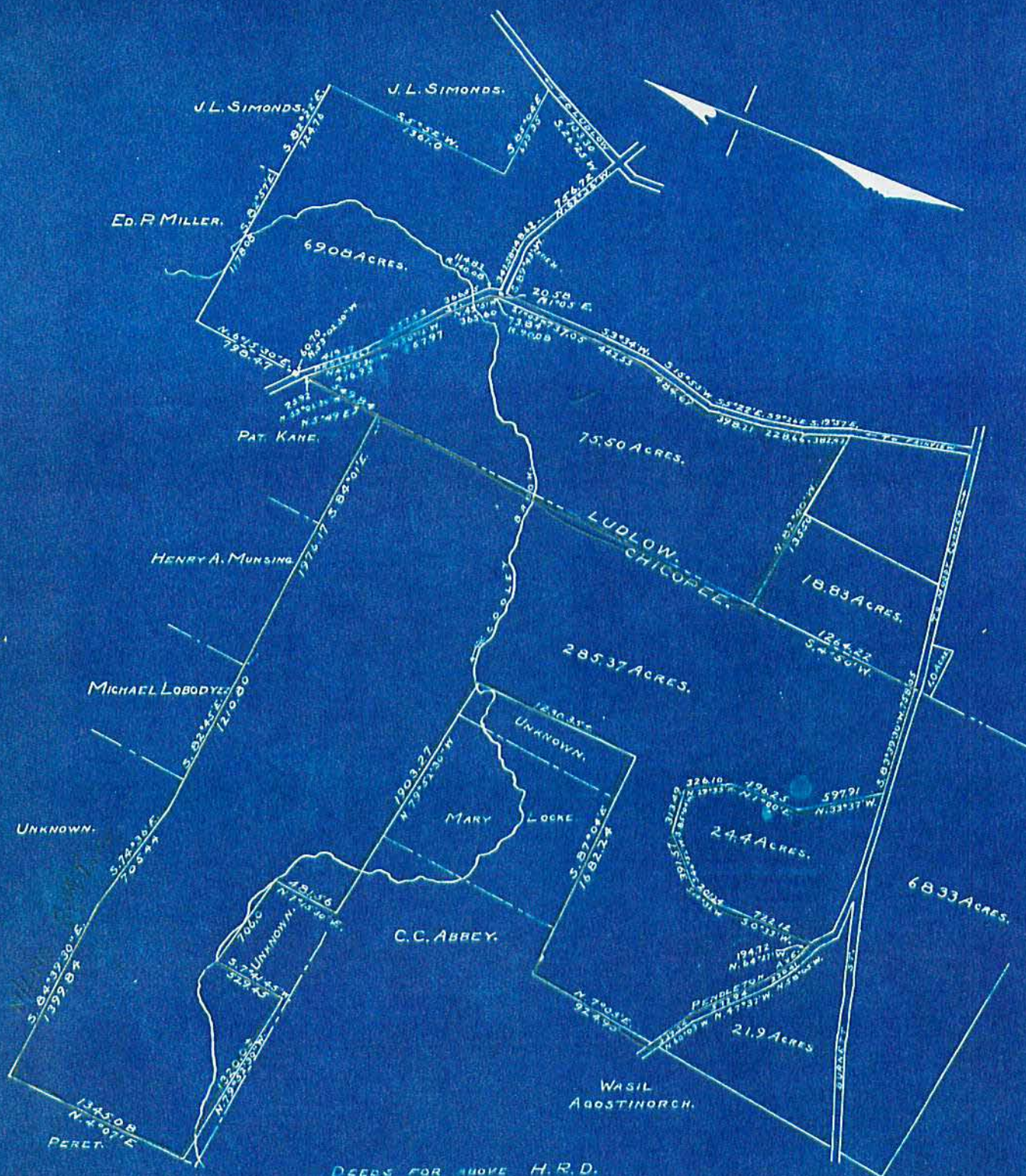
COBB, BEESLEY, 1.0 MILES, CIV. ENG'RS SPRINGFIELD, MASS.  
SCALE:- 1 IN. = 200 FT. JUNE-1914.



Unknown to City of Chicopee.

Beginning at the South Easterly corner of land owned by one Peret on the Southerly line of the 8th tier near Cooley Brook; and running thence North  $4^{\circ} 7'$  East to the South West corner of land owned by Cowles & Cadwell in the 8th tier; thence running South  $79^{\circ} 52' 30''$  East, crossing Cooley Brook about 1320.0 feet to a point; thence running North  $7^{\circ} 41' 45''$  East, 529.45 feet to a point in or near Cooley Brook; thence running Easterly in a straight line along Cooley Brook, 706.0 feet to a point in or near said Cooley Brook; thence South  $7^{\circ} 15' 30''$  West, 481.56 feet. The last four courses being by land of said Cowles & Cadwell; thence Westerly along the Southerly line of the 8th tier aforesaid by land thought to be owned by C. C. Abbey and one Lawton, again crossing Cooley Brook to point of beginning. Containing about 10.22 acres of land.





DEEDS FOR ABOVE H.R.D.

BOOK	PAGE	ACRES.
763	315	430.5
768	423	40.
784	78	40.
836	211	41.
794	86	12.

TOTAL 513.5

PLAN OF LAND  
IN CHICOPEE AND LUDLOW, MASS.  
OWNED BY  
COLES AND CADWELL, AMHERST, MASS.  
SCALE: 1 IN. = 800 FT.  
CORB, BEESLEY AND MILES, CIV. ENG'RS.  
JUNE, 1914.  
SPRINGFIELD, MASS.



1976.17  
1010.80  
705.14  
1299.24  
5292.25

Cowles & Cadwell to City of Chicopee.

Beginning at a stone bound on the road to Moody corner on the line between the City of Chicopee and the Town of Ludlow, and running thence South 83° 39' 30" West, 758.05 feet to a point; thence North 33° 37' West, 597.91 feet; thence North 1° East, 496.25 feet to a point; thence North 29° 35' West, 326.10 feet; thence South 85° 4' West, 313.49 feet; thence South 46° 52' West, 391.57 feet to a point; thence South 19° 32' West, 201.24 feet to a point; thence South no degrees, 33' West, 722.12 feet to the Northerly side of Pendleton Avenue. The last seven courses being by land of said Cowles & Cadwell; thence North 64° 27' West, 194.72 feet to a point; thence North 58° 5' West, 220.41 feet to a point; thence North 47° 37' West, 572.94 feet to a point; thence North 60° 3' West, 339.54 feet to a point. The last four courses being on the Northerly side of Pendleton Avenue; thence North 7° 3' East by land of Wasil Augustunowic, 924.95 feet to tier line between the 9th and 10th tiers; thence South 87° 4' East by land thought to be of C. C. Abbey, Mary Locke and party unknown, 1682.24 feet to a point, supposed to be on said tier line; thence North about 1230.35 feet to a point near Cooley Brook; thence North 79° 52' 30" West, crossing Cooley Brook by land of owner unknown and land supposed to be owned by Mary Locke and C. C. Abbey, again crossing Cooley Brook, 1903.27 feet to a point; thence North 7° 15' 30" East, 481.56 feet to a point in or near Cooley Brook; thence in a straight line Westerly by said Cooley Brook and owner unknown, about 706.0 feet to a point in or near Cooley Brook; thence South 7° 41' 45" West by land of owner unknown, 529.45 feet to a point; thence North 79° 52' 30" West, again crossing Cooley Brook about 1320.0 feet to a point; thence North 4° 7' East by land of one Peret, 1345.08 feet to a point, being on the Northerly line of the 8th tier; thence South 84° 39' 30" East, along said tier line 1399.84 feet to a point; thence South 74° 36' East, 705.44 feet to a point. The last two courses being by land of owners unknown; thence South 82° 45' East by land of owners unknown and Michael Lobodyz, 1210.80 feet to an old ground stone, marking the line between said Lobodyz and Henry A. Munsing; thence South 84° 1' East by land of said Munsing and Patrick Kane, 1976.17 feet to a point on the line between the City of Chicopee and Town of Ludlow, thence Southerly on said line between City of Chicopee and Town of Ludlow crossing Cooley Brook to point of beginning. Containing about 285.37 acres.

Second Parcel (In Ludlow)

Beginning on the Southerly side of Prospect Street at the intersection of said Southerly line of said street and the line between City of Chicopee and the Town of Ludlow, and running thence South 53° 2' 30" East, 25.92 feet to a point; thence South 42° 10' 30" East, 416.93 feet to a point; thence South 50° 12' East, 557.97 feet to a point; thence South 45° 51' East, crossing Cooley Brook 365.60 feet to a point; thence by a curve to the right, the radius of which is 90.08 feet, and distance on curve being 73.84 feet to a point; thence South 1° 5' West, 737.05 feet to a point; thence South 3° 34' West, 442.53 feet to a point; thence South 15° 53' West, 484.69 feet to a point; thence South 5° 22' East, 398.21 feet to a point; thence South 9° 26' East, 228.66 feet to a point; thence South 19° 57' East, 382.43 feet to a point of land of owner unknown. The last eleven courses being on the Westerly side of Prospect Street, so called; thence North 82° 40' West, about 1355.0 feet to the line between the aforesaid City of Chicopee and the Town of Ludlow; thence Northerly by said line between said City and Town crossing Cooley Brook to the point of beginning. Containing about 75.50 acres of land.



Third Parcel (In Ludlow)

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Beginning on the Northerly side of Prospect Street at a stone bound, marking the line between the City of Chicopee and the Town of Ludlow and running thence North  $6^{\circ} 15' 30''$  East on line between said City and Town 798.47 feet to a stake and stone; thence South  $82^{\circ} 57'$  East by Ed. P. Miller, crossing Cooley Brook 1178.08 feet to a stake and stone, marking the South East corner of land of said Miller; thence South  $82^{\circ} 22'$  East by land of J. Leroy Simonds, 724.76 feet to a stake and stone, marking the North West corner of other land owned by J. Leroy Simonds in the 7th tier. The last two courses being on the line between the 6th and 7th tiers; thence South  $5^{\circ} 52'$  West by land of J. Leroy Simonds, 1361.0 feet to a stake and stone, marking the South West corner of land owned by said Simonds in the 7th tier; thence South  $85^{\circ} 4'$  East, 693.35 feet to a stake and stone on the Westerly side of road leading to Ludlow; thence South  $26^{\circ} 25'$  West by the Westerly line of said road; 703.30 feet to the inner section of the road to Ludlow with the road leading to Prospect Street; thence North  $62^{\circ} 36'$  West, 756.72 feet to a point; thence by a curve to the left, the radius of which is 313.57 feet, 148.63 feet on the curve to a point; thence South  $89^{\circ} 43'$  West, 347.58 feet to a point, marking the intersection of road leading to Prospect Street and the Easterly side of Prospect Street. The last three courses being on the Northerly side of said road; thence North  $1^{\circ} 5'$  East, 20.58 feet to a point; thence by a curve to the left, the radius of which is 140.08 feet, 114.83 feet on the curve; thence North  $45^{\circ}$  degrees, 51' West, crossing Cooley Brook 366.55 feet to a point; thence North  $50^{\circ} 12'$  West, 557.53 feet to a point; thence North  $42^{\circ} 10' 30''$  West, 419.17 feet to a point; thence North  $53^{\circ} 2' 30''$  West, 60.70 feet to point of beginning.

The above three parcels being conveyed to Cowles & Cadwell by deeds H.R.D., book 765, page 515, also book 788, page 493, also book 784, page 78, also book 836, page 211, also book 794, page 86, covering 563 $\frac{1}{2}$  acres of which above described 429.95 acres being parts thereof.



MICHAEL LOBOOYE 2.

6TH TIER.  
JULES RUDIGER.

7TH TIER.  
56.51 ACRES.

703.42  
N. 77° 36' W.

N. 82° 45' W. 57.5

8TH TIER.

COLES AND CADWELL.

1399.84  
N. 84° 37' 30" W.

UNKNOWN.

926.57  
N. 49° 37' E.

PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

UNKNOWN.

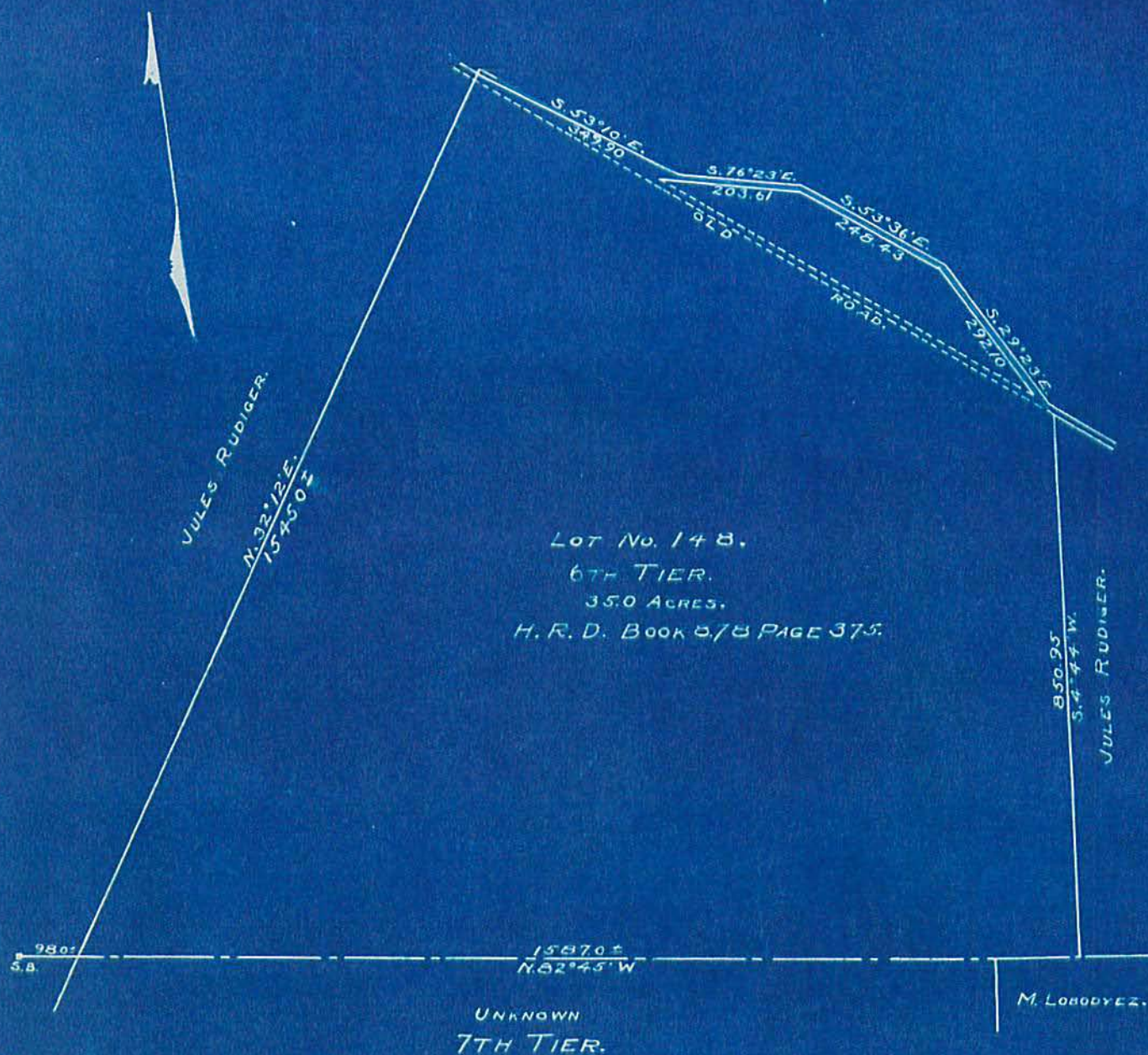
SCALE:- 1 in. = 200 FT. JUNE- 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Unknown to City of Chicopee.

Beginning at a stake and stone on a Southerly line of the 7th tier at the South West corner of land owned by Michael Lobodyz and running thence North  $82^{\circ} 45'$  West to a point; thence North  $74^{\circ} 36'$  West, 705.44 feet to a point; thence North  $84^{\circ} 39' 30''$  West, 1399.84 feet to a corner. The last three courses being by land of Cowles & Cadwell, and said corner marking the North West corner of land of said Cowles & Cadwell in the 8th tier; thence North  $48^{\circ} 37'$  East, 928.57 feet to a point; thence North  $32^{\circ} 12'$  East to the Northerly line of the 7th tier, at land owned by Jules Rudiger; thence Easterly on said tier line by land of Jules Rudiger to the North West corner of land owned by Michael Lobodyz; thence Southerly by Michael Lobodyz's land to point of beginning. Containing about 56.51 acres of land.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

**JULES RUDIGER.**  
CHICOPEE, MASS.

SCALE: - 1 in. = 200 ft. JUNE-1914.  
COBB, BEESLEY & MILES, CIV. ENGRS SPRINGFIELD, MASS.

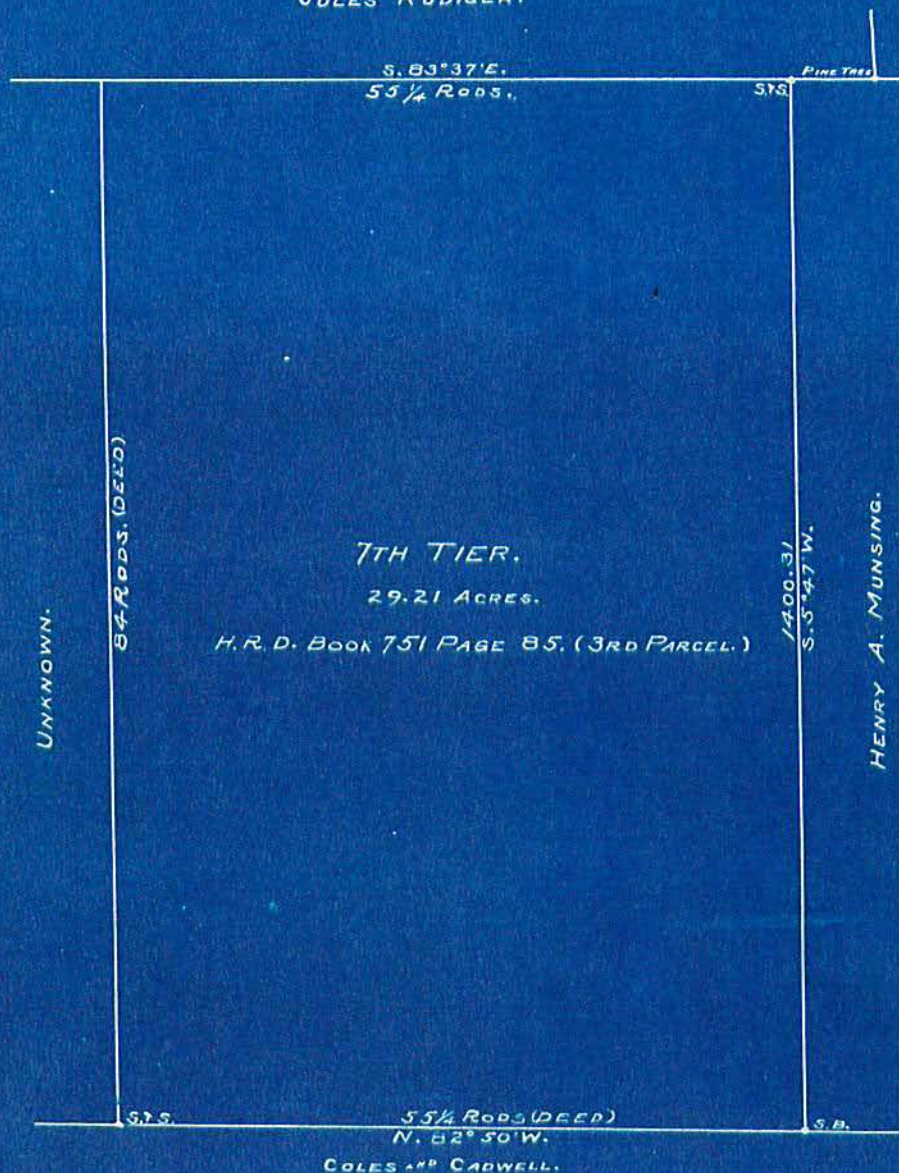


Jules Rudiger to City of Chicopee.

Beginning at a point on a Southerly line of the 6th tier, about 98.0 feet Easterly of a stone bound on said tier line marking the South West corner of land of said Rudiger, and running thence North  $32^{\circ} 12'$  East, about 1545.0 feet to a point on the Northerly side of travelled road known as Prospect Street; thence South  $53^{\circ} 10'$  East, 349.90 feet to a point; thence South  $76^{\circ} 23'$  East, 203.61 feet to a point; thence South  $53^{\circ} 36'$  East, 248.43 feet to a point; thence South  $29^{\circ} 23'$  East, 292.10 feet to the Southerly side of said travelled road. The last four courses being the center of road known as Prospect Street aforesaid; thence South  $4^{\circ} 44'$  West, 850.95 feet to a point on the Southerly line of the aforesaid 6th tier. The last six courses by land of Said Rudiger; thence North  $82^{\circ} 45'$  West by land of Michael Lobodyz and owner unknown on the Southerly line of said tier, about 1587.0 feet to point of beginning. Containing about 35 acres of land, and being part of land conveyed to Jules Rudiger by Monroe Keith in deed H.R.D., book 878, page 375.



6TH TIER.  
JULES RUDIGER.



8TH TIER.

PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY

**MICHAEL LOBODYEZ,**  
CHICOPEE, MASS.

SCALE: - 1 in. = 200 ft. JUNE - 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Michael Lobodyez to City of Chicopee.

Beginning at a brown stone bound on the Southerly line of the 7th tier, marking the South West corner of land owned by Henry A. Munsing, and running thence North  $82^{\circ} 50'$  West on the Southerly line of said tier, by land of Cowles & Cadwell,  $55\frac{1}{4}$  rods to a stake and stone; thence Northerly by land of owner unknown, about 84 rods to the Northerly line of said tier, at land of Jules Rudiger; thence South  $83^{\circ} 37'$  East, about  $55\frac{1}{4}$  rods to a stake and stone on said tier line, and marking the North West corner of land owned by Henry A. Munsing; thence South  $5^{\circ} 47'$  West, 1400.31 feet to point of beginning. Containing about 29.21 acres of land, and meaning to convey land described as the third parcel in deed H.R.D., book 751, page 85.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**HENRY A. MUNSING,**  
LUDLOW, MASS.  
SCALE: 1 IN. = 100 FT.  
COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.  
JUNE - 1914.



Henry A. Munsing to City of Chicopee.

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Beginning at an old brown stone on the Southerly line of the 7th tier, marking the South East corner of land owned by Michael Lobodyez; and running thence North  $5^{\circ} 47'$  East, 240.95 feet to a point by land of Micheal Lobodyez; thence South  $84^{\circ} 1'$  East by land of said Munsing to land of Patrick Kane; thence Southerly by land of said Patrick Kane, 240.95 feet to a point on said tier line; thence North 84 degrees, 1' West by land of Cowles & Cadell on said tier line to point of beginning. Meaning to convey a strip 240.95 feet wide, being the Southerly part of land owned by said Munsing, and containing about 6.31 acres of land.





PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**PATRICK KANE.**

SCALE: 1 IN. = 100 FT.  
COBB, BEESLEY & MILES, CIV. ENGRS. SPRINGFIELD, MASS.  
JUNE - 1914.

COLES AND CADWELL.

HENRY A. MUNSING.



Patrick Kane to City of Chicopee.

Beginning at a stake and stone thought to be on the line between the City of Chicopee and the Town of Ludlow, and marking the South East corner of land conveyed to Patrick Kane in deed H.R.D., book 716, page 231; and running thence North  $84^{\circ} 1'$  West by land of Cowles & Cadwell to land owned by Henry A. Munsing; and running thence Northerly by land of said Munsing 240.95 feet to a point; thence South  $84^{\circ} 1'$  East by land of said Patrick Kane to said City line; thence South about  $6^{\circ} 15' 30''$  West, 240.95 feet to point of beginning, meaning to convey a strip 240.95 feet the entire width at the Southerly side of land of said Patrick Kane, and containing about 4.78 acres of land.



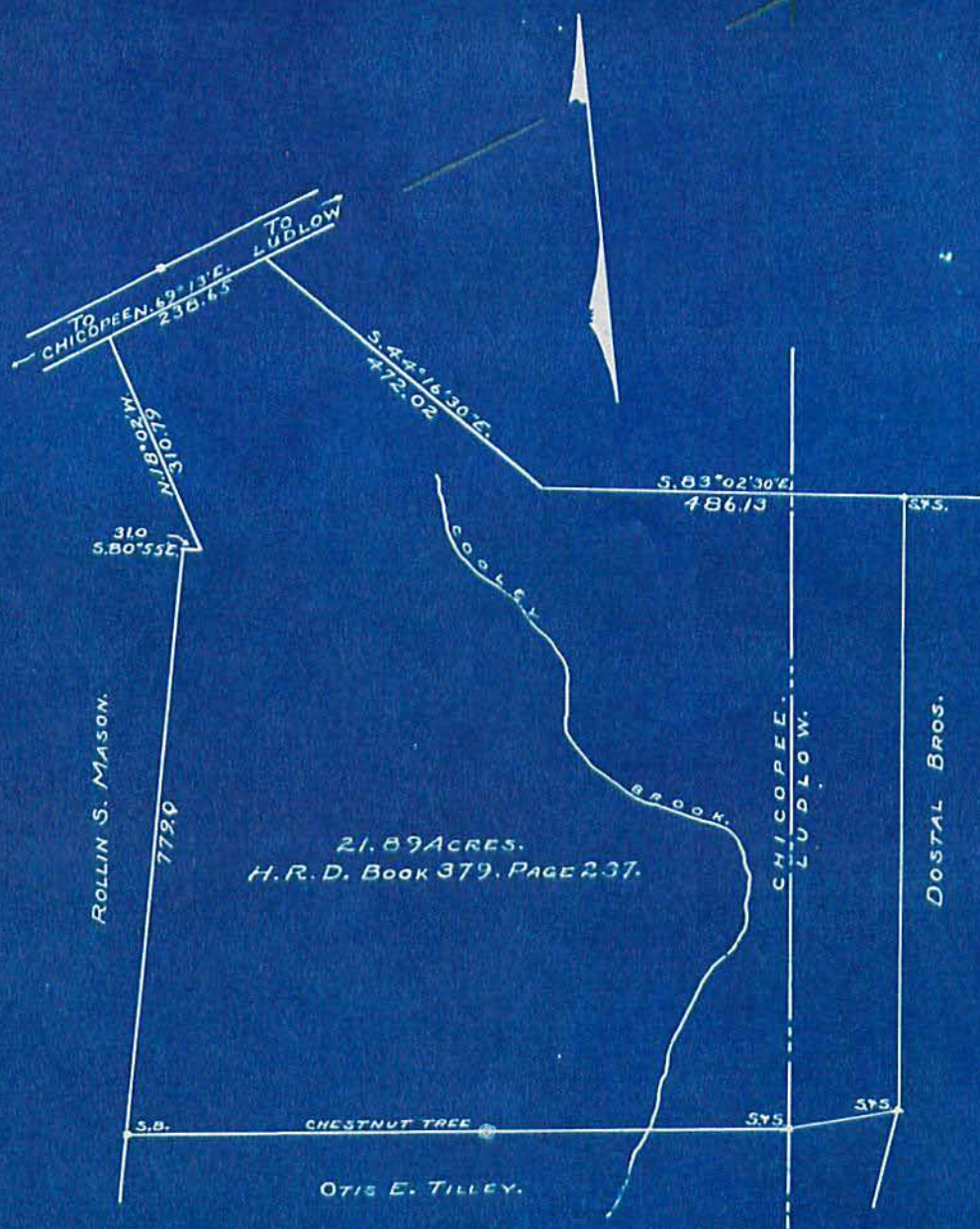




Otis E. Tilley to City of Chicopee.  
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Beginning at a stake and stone on the South line of the 6th tier and marking the line between Patrick Kane, Cowles & Cadwell and Ed.P. Miller, and being the South East corner of land herein conveyed; running thence Westerly by land of Patrick Kane about 902.6 feet to land thought to be owned by Henry A. Munsing; thence North by said Munsing's land about 1379.50 feet to a stake and stone on the Northerly line of the 6th tier aforesaid; thence Westerly on said tier line about 77.0 feet to a point; thence Northerly about 596 $\frac{1}{2}$  feet to a stone bound at land of Rollin S. Mason; thence Easterly by land of said Mason, crossing Cooley Brook to a stake and stone, thought to be on the line between the City of Chicopee and the Town of Ludlow; thence Easterly to a stake and stone at land of Dostal Bros.; thence Southerly by land of said Dostal Bros. to a stake and stone on the Northerly line of said 6th tier, the same marking the North West corner of land owned by Angeline Despres, and being on the City line aforesaid; thence Southerly on said City line by land of said Despres crossing Cooley Brook and continuing in same line by land of said Miller to point of beginning, being land conveyed to said Otis E. Tilley by deed H.R.D., book 379, page 240. Containing about 28.42 acres of land in the 6th tier and about 13.51 acres of land in the 5th tier, making a total of about 41.93 acres herein conveyed.





PLAN OF LAND  
IN CHICOPEE, MASS.

OWNED BY

**ROLLIN S. MASON,**  
CHICOPEE, MASS.

SCALE: 1 in. = 200 ft.

JUNE-1914

COBB, BEESLEY & MILES, CIV. ENG'RS. SPRINGFIELD, MASS.



Rollin S. Mason to City of Chicopee.

Beginning on the Southerly side of road leading to Chicopee Falls from Ludlow at a point near Cooley Brook and running thence South  $44^{\circ} 16' 30''$  East, 472.02 feet to a point; thence South  $83^{\circ} 2' 30''$  East, crossing the line between the City of Chicopee and Town of Ludlow, 486.13 feet to a stake and stone; thence Southerly by land of Dostal Bros. to a stake and stone marking the North East corner of land owned by Otis E. Tilley; thence Westerly by land of said Tilley to a stake and stone, thought to be on said City line; thence Westerly by land of said Tilley crossing Cooley Brook to a stone bound, marking the North West corner of said Tilley land; thence North about 779.0 feet by land of said Mason to a point; thence South  $80^{\circ} 55' 30''$  East, about 31 feet to a point; thence North  $18^{\circ} 2'$  West by land of said Mason, 310.79 feet to a point on the Southerly line of said road; thence North  $69^{\circ} 13'$  East by the Southerly line of said road, crossing Cooley Brook 238.65 feet to point of beginning. Containing about 21.89 acres of land, and being in the 5th tier of lots and meaning to convey part of land conveyed to said Mason by deed H.R.D., book 379, page 237.



PLAN OF LAND  
IN LUDLOW, MASS.  
OWNED BY  
**DOSTAL BROS.**  
SCALE: 1 in. = 200 FT. JUNE-1914  
COBB, REELEY & MILES, CIV. ENGRS. STURBRIDGE, MASS.



4TH TIER.

S. 03° 02' 30" E.  
703.75

CHICOPPEE, LUDLOW.  
ROLIN G. MASON.

5TH TIER.  
33.54 ACRES.  
H. R. D. Book 736 Page 271.

S. 45° 02' 30" E.  
2250.33

DOSTAL BROS.

N. 84° 50' 30" W.

ANELINE DESPRES.

6TH TIER.

J. LE ROY SIMMONDS.

180.0  
S. 84° 50' 30" E.

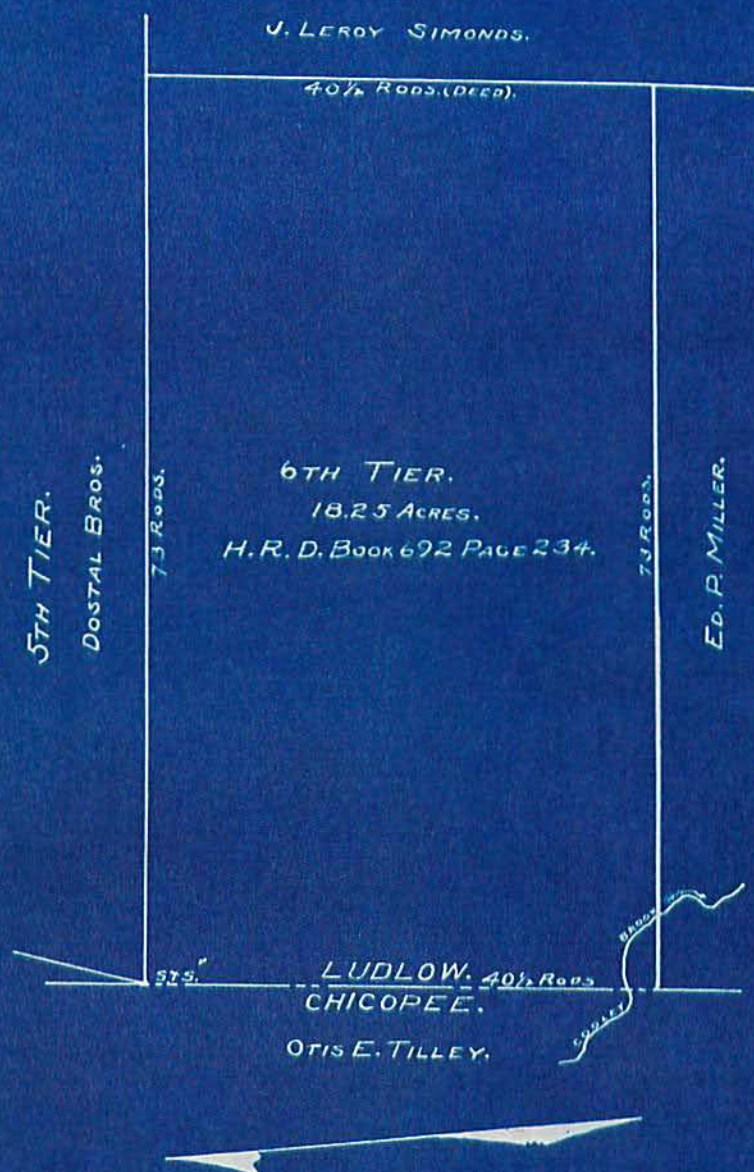
TO CHICOPPEE FALLS.



Dostal Bros. to City of Chicopee.

Beginning at a point about 180.0 feet Westerly from the Westerly side of the road leading to Ludlow from Moody corner and being on the Southerly line of the 5th tier, the bearing of which is about North  $84^{\circ} 50' 30''$  West by land of J. Leroy Simonds and Angeline Despres, to a stake and stone marking the North West corner of land of Angeline Despres and being on the line between the City of Chicopee and the Town of Ludlow, and running thence North Easterly by land of Otis E. Tilley to a stake and stone; thence Northerly by land of Rollin S. Mason to a stake and stone on the North line of the 5th tier; thence South  $83^{\circ} 2' 30''$  East, 103.75 feet to a point; thence South  $45^{\circ} 2' 30''$  East by land of grantors, 2250.39 feet to point of beginning, containing about 33.54 acres of land and meaning to convey a part of land conveyed to said grantors by deed H.R.D., book 736, page 271.





PLAN OF LAND  
IN LUDLOW, MASS.  
OWNED BY  
**ANGELINE DESPRES.**

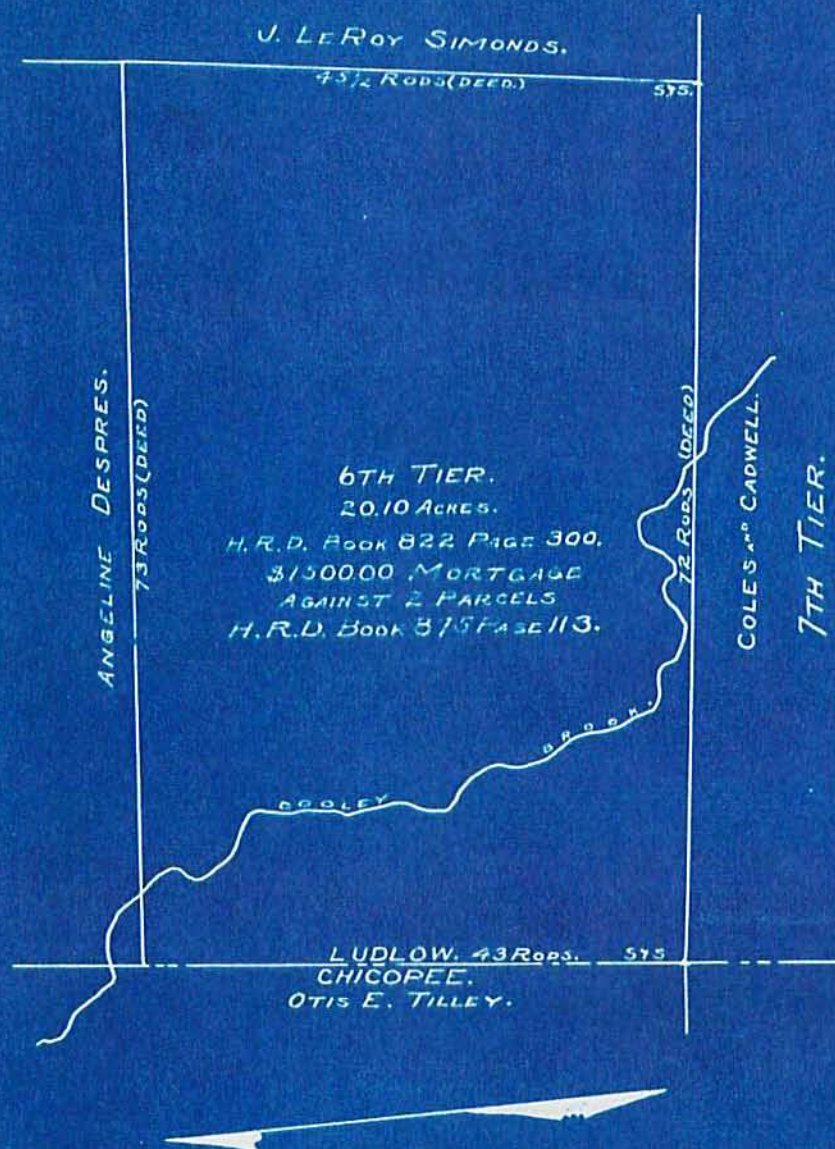
SCALE:- 1 in. = 200 ft. JUNE - 1914.  
COBB, BEESLEY AND MILES, CIV. ENGRS. SPRINGFIELD, MASS.



Angeline Despres to City of Chicopee.

Beginning at a stake and stone on the line between the City of Chicopee and the Town of Ludlow on the Northerly line of the 6th tier and marking the South West corner of land of Dostal Bros. and running thence Easterly by land of Dostal Bros. on said tier line about 73 rods to land of J. Leroy Simonds; thence Southerly by land of said Simonds about 40 $\frac{1}{2}$  rods to land of Ed.P.Miller; thence Westerly by land of said Miller about 73 rods crossing Cooley Brook to said City line at land of Otis E. Tilley; thence Northerly again crossing Cooley Brook on said City line and by land of Otis E. Tilley about 40 $\frac{1}{2}$  rods to point of beginning. Containing about 18.25 acres of land, and being land conveyed to Angeline Despres by deed H.R.D., book 692, page 234.





PLAN OF LAND  
IN LUDLOW, MASS.

OWNED BY

**ED. P. MILLER,**

SCALE: 1 IN = 200 FT.

COBB, BEESLEY & MILES, CIV. ENG'RS. JUNE, 1914. SPRINGFIELD, MASS.



Ed. P. Miller to City of Chicopee.

Beginning at a stake and stone at the South West corner of land herein conveyed and being on the Southerly line of the 6th tier on the line between the City of Chicopee and the Town of Ludlow, and marking the corners of land of Cowles & Cadwell, Patrick Kane and Otis E. Tilley, and running thence Northerly on said City line by land of Otis E. Tilley, 43 rods to land of Angeline Despres; thence running Easterly crossing Cooley Brook by land of Angeline Despres, 73 rods to land of J. Leroy Simonds; thence Southerly by land of said Simonds about 45 $\frac{1}{2}$  rods to stake and stone on said tier line at land of said Cowles & Cadwell; thence Westerly, again crossing Cooley Brook by land of Cowles & Cadwell about 72 rods to point of beginning. Containing about 20.10 acres of land and being premises conveyed to Ed.P. Miller by deed H.R.D., book 822, page 300.



5TH TIER.  
DOSTAL BROS.

ANNE LINE DESPRES.

ED. P. MILLER.

6TH TIER.  
42.21 ACRES.  
H.R.D. BOOK 720. PAGE 545.

To  
LUDLOW  
1504.13  
S 14° 02' E  
514.022

575

724.76  
N. 82° 22' W

575

N 83° 24' W  
621.78

COLES AND CADWELL.

S 41° 35' E  
510.48

241.84  
S 16° 27' W

7TH TIER.  
27.35 ACRES.  
H.R.D. BOOK 720. PAGE 545.

PLAN OF LAND  
IN CHICOPEE, MASS.  
OWNED BY  
**J. LEROY SIMONDS.**  
SCALE: 1" = 200 FT. JUNE-1914  
CORR. BEESLEY AND MILES, CIVIL ENGINEERS,  
SPRINGFIELD, MASS.

N 5° 52' E  
1361.0

681.12  
S 29° 21' W

693.35  
N. 65° 04' W

575

COLES AND CADWELL.  
8TH TIER.

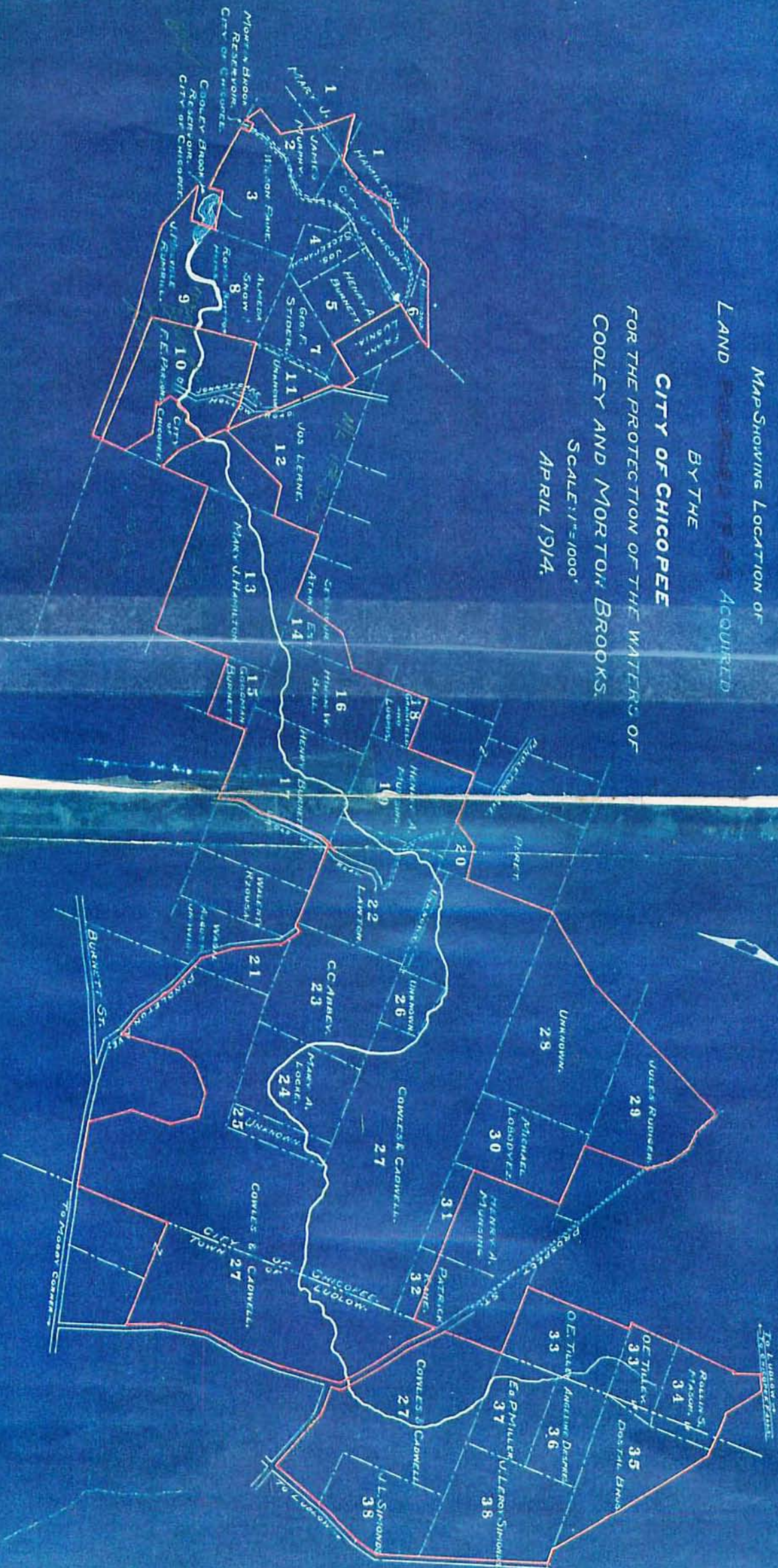


J. Leroy Simonds to City of Chicopee.

Beginning at a stake and stone on the Westerly side of road leading from Moody corner to Ludlow at the North East corner of land owned by Cowles & Cadwell in the 8th tier and being on the North line of said tier and running thence North  $85^{\circ} 4'$  West by land of said Cowles & Cadwell, 693.35 feet to a stake and stone; thence North  $5^{\circ} 52'$  East by land of said Cowles & Cadwell, 1361. feet to a stake and stone on the Northerly line of the 7th tier, thence running North  $82^{\circ} 22'$  West on said tier line by land of said Cowles & Cadwell, 724.76 feet to stake and stone at the South Easterly corner of land owned by Ed.P.Miller; thence Northerly by land of Ed.P. Miller to land of Angeline Despres, continuing Northerly by land of Angeline Despres to the Northerly line of the 6th tier at land owned by Dostal Bros., thence about South  $84^{\circ} 50' 30''$  East on said Northerly line of the 6th tier to the Westerly side of said road; thence South  $14^{\circ} 2'$  East, 1564.19 feet to the Southerly line of said 6th tier; thence South  $15^{\circ} 35'$  East, 510.46 feet to a point; thence South  $16^{\circ} 47'$  West, 241.84 feet to a point; thence South  $29^{\circ} 21'$  West, 681.19 feet to point of beginning. The last four courses being on the Westerly side of said road, being part of the premises conveyed in H.R.D., book 720. page 545, to J. Leroy Simonds. Containing about 42.21 acres in the 6th tier, and about 27.35 acres in the 7th tier, making a total of about 69.56 acres.



SCALE: 1"=1000  
APRIL 1914.







**End of Book D05 ~ Dams ~ City of Chicopee**